

ED 100 653

88

SE 018 344

TITLE Grade One, Environmental Education Guide.  
INSTITUTION Project I-C-E, Green Bay, Wis.  
SPONS AGENCY Bureau of Elementary and Secondary Education  
(DHEW/OE), Washington, D.C.; Wisconsin State Dept. of  
Education, Madison.  
PUB DATE [74]  
NOTE 111p.  
EDRS PRICE MF-\$0.75 HC-\$5.40 PLUS POSTAGE  
DESCRIPTORS \*Conservation Education; \*Elementary Education;  
\*Environmental Education; Grade 1; Instructional  
Materials; Interdisciplinary Approach; Learning  
Activities; \*Natural Resources; Outdoor Education;  
Science Education; \*Teaching Guides  
IDENTIFIERS Elementary Secondary Education Act Title III; ESEA  
Title III; \*Project I C E

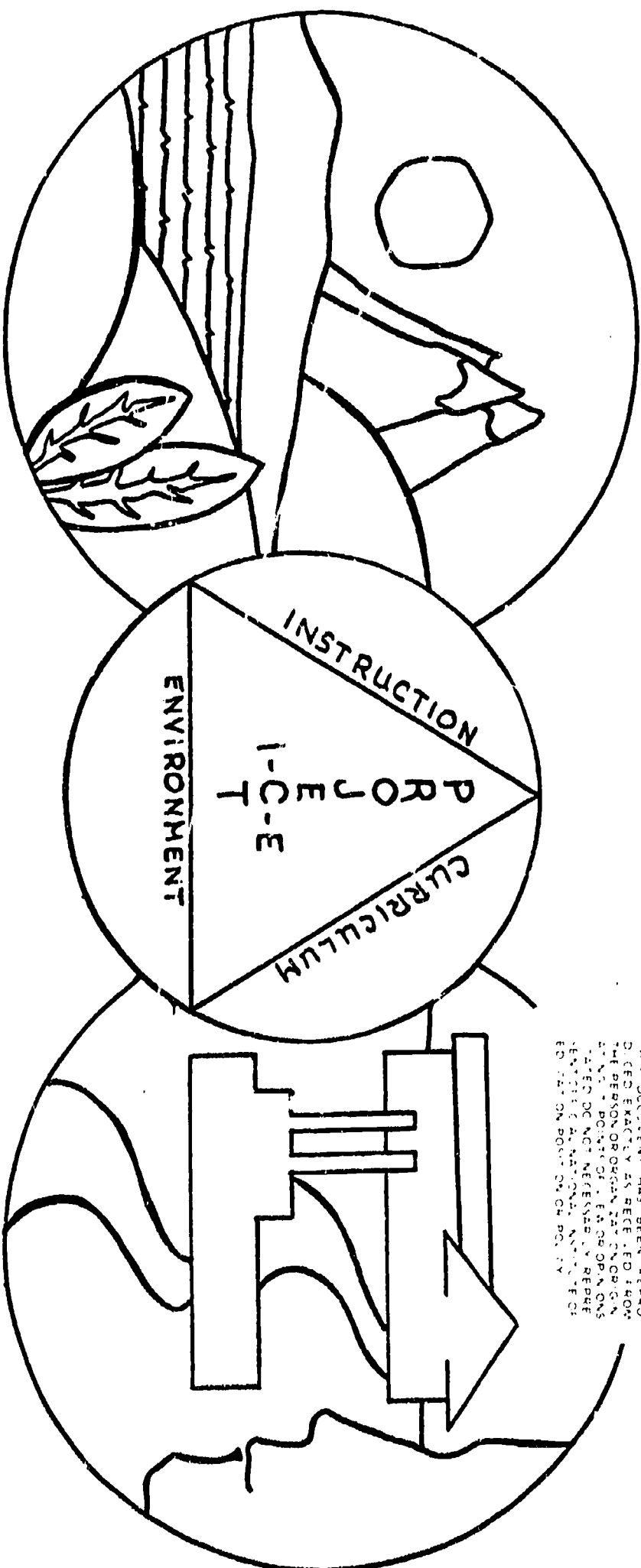
## ABSTRACT

This first grade environmental education guide is one of a series of guides, K-12, which were developed by teachers to help introduce environmental education into the total curriculum. The guides are supplementary in design; it is the teacher's decision when the concepts, objectives, activities, and resources may best be integrated into the existing classroom curriculum. This guide contains a series of 12 episodes (minilessons), each having a number of suggested in- and out-of-class learning activities. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Although the same concepts are used throughout the K-12 program, emphasis is placed on different aspects of each concept at different grade levels. The first grade guide focuses on aspects such as planets and seasons, living and nonliving organisms, overpopulation, water uses, and animal adaptation. Each of the 12 concepts is covered in one of the episodes contained in the guide. Further, each episode offers subject area integration, subject area activities, interdisciplinary activities, cognitive and affective behavioral objectives, and suggested references and resource materials useful to teachers and students. (Author/TK)

# ENVIRONMENTAL EDUCATION GUIDE

U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT THE NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



## GRADE ONE

Robert J. Wapinski  
Project I-C-E

P R O J E C T I - C - E  
(Instruction-Curriculum-Environment)

1927 Main Street  
Green Bay, Wisconsin 54301  
(414) 468-7464

PROJECT STAFF

Robert Warpinski - Director

Robert Kellner Terrence Hess - Assistant Directors

George Howlett, Jr. - E. E. Specialist

Nancy Timm Lynn Kuehn - Secretaries

ALL RIGHTS RESERVED

These materials were produced pursuant  
to a grant under Title III, E.S.E.A.

The Wisconsin Department of Public Instruction  
Project No. 59-70-0135-4

Wisconsin Area "B" Regional Project  
Serving All Schools in Cooperative Educational Service Agencies 3-8-9

Ludwig Petersen  
Coordinator, C.E.S.A. #3

John F. David  
Coordinator, C.E.S.A. #9  
Project Administrator

Kenneth Poppy  
Coordinator, C.E.S.A. #8

BEST COPY AVAILABLE

## FORWARD TO PROJECT I-C-E ENVIRONMENTAL EDUCATION GUIDES

In 1969, the First Environmental Quality Education Act was proposed in the United States Congress. At the time of the introduction of that legislation, I stated:

"There is a dire need to improve the understanding by Americans of the ominous deterioration of the Nation's environment and the increasing threat of irreversible ecological catastrophe. We must all become stewards for the preservation of life on our resource-deficient planet."

In the three years since the Environmental Education Act was passed by the Congress, much has happened in the United States to reinforce the great need for effective environmental education for the Nation's young people. The intensive concern over adequate energy resources, the continuing degradation of our air and water, and the discussion over the economic costs of the war against pollution have all brought the question of the environmental quality of this nation to a concern not merely of aesthetics but of the survival of the human race.

The intense interest by the public in the quality of our lives

as affected by the environment clearly indicates that we cannot just use incentives and prescriptions to industry and other sources of pollution. That is necessary, but not sufficient." The race between education and catastrophe can be won by education if we marshal our resources in a systematic manner and squarely confront the long-term approach to saving our environment through the process of education.

As the incessant conqueror of nature, we must reexamine our place and role. Our world is no longer an endless frontier. We constantly are feeling the backlash from many of our ill-conceived efforts to achieve progress.

Rachel Carson's theme of "reverence for life" is becoming less mystical and of more substance as our eyes are opened to much of the havoc we have wrought under the guise of progress. A strong commitment to an all-embracing program of environmental education will help us to find that new working definition of progress that is a pre-requisite to the continued presence of life on this planet.

- Senator Gaylord Nelson

# ACKNOWLEDGEMENT

The interest and dedicated effort of the following teachers from Wisconsin Area "B" has led to the development of the Project I-C-E Environmental Education K-12 series:

D. C. Aderhold, Bonduel  
Joan Alioto, Denmark  
Mary Anders, Winneconne  
Eugene Anderson, Peshigo  
James Anderson, Green Bay  
John Anderson, Peshigo  
Peggy Anderson, Green Bay  
Walter Anderson, Wausaukee  
Angela Anthony, Gibraltar  
Dr. Harold Baeten, St. Norbert, DePere  
William Baggs, Shiocton  
Anthony Balistreri, Howard-Suamico  
Lowell Baltz, Weyauwega  
David Bartz, Sturgeon Bay  
Bonnie Beamer, Coleman  
Robert Becker, Fox Valley Luth., Appl.  
William Behring, Lourdes, Oshkosh  
David Bell, Neenah  
Marie Below, Clintonville  
Lousene Benter, Gillett  
Lillian Berges, Seymour  
Laura Berken, Oconto Falls  
Peter Biolo, W. DePere  
Carmella Blecha, Green Bay  
Merlyn Blonde, Shawano  
Barbara Jean Bobrowitz, Green Bay  
William Bohne, Kimberly  
Gailen Braun, Lena  
Joan Charnetski, Sevastopol  
Clifford Christensen, Winneconne  
Bob Church, Little Chute  
Lee Clasen, Luxemburg-Casco  
Kathryn Colburn, Algoma  
Merle Colburn, Algoma  
Bill Coie, Gillett  
Willard Collins, Crivitz  
Ronald Conradt, Shiocton  
Ken Couillard, Hortonville

John Cowling, Niagara  
James Curran, Green Bay  
Sara Curtis, Green Bay  
Nicholas Dal Santo, Pembine  
Judy DeGrave, W. DePere  
Carol DeGrout, Ashwaubenon  
Duane Delorme, Green Bay  
Ellen DePuydt, Gillett  
John DeWan, Green Bay  
Robert H. Dickinson, Oconto  
R. A. Dirks, Gillett  
Robert Dix, St. Joe's Acad., G.B.  
Dennis Dobrzanski, White Lake  
Darwin Eastman, Appleton  
Linda Elting, Appleton  
Janet Elinger, Ashwaubenon  
Phyllis Ellefson, Wash. Island  
Raymond Emerich, Hortonville  
Mike Ercegovic, Winneconne  
Gerry Farrell, Menasha  
Keith Fawcett, W. DePere  
Billie Feichtinger, Green Bay  
Rev. Bruno Frigo, Abbot Penning's, DePere  
Ann Fuhrmann, Marinette  
Raymond Gantenbein, Green Bay  
Dona Geeding, Menasha  
Armin Gerhardt, Appleton  
Leroy Gerl, Oconto  
Jack Giachino, Seymour  
Rev. Gordon Gilsdorf, Sacred Heart, Oneida  
Mike Gleffe, St. Matthews, Green Bay  
Lillian Goddard, Coleman  
Charles Gostas, Freedom  
Karen Grunwald, St. James Luth., Shawano  
Michael Haasch, Pulaski  
Sr. Barbara Haase, St. Bernard, G.B.  
Janelle Hagerty, Resurrection, G.B.  
Robert J. Haglund, Green Bay

Robert Haen, Luxemburg-Casco  
Donald Hale, Winneconne  
Lee Hailberg, Appleton  
Raymond Hammond, Hortonville  
Russ Hanseter, Seymour  
Herbert Hardt, Gibraltar  
Emma Jean Harman, Sevastopol  
Bill Harper, Lena  
Beth Hawkins, Xavier, Appleton  
Mike Hawkins, Xavier, Appleton  
Terry Heckel, Marinette  
Gary Heil, Denmark  
Jerome Hennes, Little Chute  
Robert Herz, St. James Luth., Shawano  
Wendell Hillskotter, Weyauwega  
Nannette Hoppe, Howard-Suamico  
Joe Hucek, Pulaski  
Catherine Huppert, DePere  
Gene Hurrish, Green Bay  
James Huss, Freedom  
John Hussey, Green Bay  
Sue Husting, Green Bay  
Barbara Huth, Menasha  
Sr. Claudette Jeanquart, St. Charles,  
Lena  
Darrell Johnson, Hortonville  
DeAnna Johnson, Denmark  
Kathleen Jonen, Kaukauna  
Sr. Lois Jonet, Holy Angels, Appleton  
Ester Kaatz, Wausaukee  
Paul Kane, Ashwaubenon  
Ken Kappell, St. Alousius, Kaukauna  
Kris Karpinen, W. DePere  
Mel Kasen, Gibraltar  
Ken Kelther, Appleton  
Mary Chriss, Hortonville  
Mike Kersten, Suring  
George Kreiling, Marinette

James Krenek, Coleman  
 Bernadynne King, Neenah  
 Everett Klinzing, New London  
 Douglas Koch, Cath. Cent., Marinette  
 Frank Koehn, Resurrection, G.B.  
 Lynn Koehn, Pulaski  
 Jack Koivisto, Green Bay  
 Fred Krueger, Oshkosh  
 Fritz Krueger, Oshkosh  
 Jim Krueger, Winneconne  
 Ervin Kunes, Marinette  
 Sr. Mary Alyce Lach, Cathedral, G.B.  
 Thomas LaFountain, Appleton  
 Steven P. Lapacz, Resurrection, G.B.  
 Mae Rose LaPointe, St. John High, L. Chute  
 Rosemarie Lawler, Hortonville  
 Kathleen LeBreck, Oconto  
 Robert Lee, Neenah  
 Don Leibelt, Green Bay  
 Phillip Lewicki, Gillett  
 Harold Lindhorst, St. Martin Luth., Clint.  
 Edward Linn, Appleton  
 John Little, Winneconne  
 Dennis Lord, Little Wolf  
 Ellen Lotz, W. DePere  
 Jean Lucier, Ashwaubenon  
 Judy Luedtke, St. Rose, Clintonville  
 Roy Lukes, Gibraltar  
 Sr. Anna Maar, St. Philips, G. B.  
 James Maki, Sturgeon Bay  
 Doris Malcheski, Howard-Suamico  
 Donald Marsh, Bonduel  
 Joyce Mateju, Algoma  
 Mary Mathis, Denmark  
 Margaret McCambridge, White Lake  
 Judy McGown, Green Bay  
 Kathleen McMahon, Green Bay  
 Margaret McMahon, Little Chute  
 Rick Menard, Little Chute  
 Priscilla Mereness, Wrightstown  
 Robert Meyer, Neenah

Richard Minten, W. DePere  
 David Miskulin, Goodman  
 Wendell Mitchell, Green Bay  
 Sharon Moore, Pulaski  
 Gloria Morgan, Linsmeier, G.B.  
 Lyle Nahley, Green Bay  
 Arnold Neuzil, Shiocton  
 Jim Nuthals, Lourdes, Oshkosh  
 Dorothy O'Brien, Wausaukee  
 Mildred O'Connell, Green Bay  
 Don Olsen, Shawano  
 Neil Olsen, Pulaski  
 Jean Marie O'Malley, Green Bay  
 Terry Otto, St. John Luth., Suring  
 Carl Paquet, Denmark  
 Ed Patschke, Menasha  
 Arthur Paulson, Oconto Falls  
 David Paulus, Neenah  
 George Pederson, Southern Door  
 AnnaMay Peters, Florence  
 Connie Petersen, St. Martin Luth., Clint.  
 Paul Plantico, Green Bay  
 Gene Ploetz, Kaukauna  
 Virginia Pomusl, White Lake  
 Willard Poupore, Little Chute  
 Marie Prochaska, Lena  
 Christine Proctor, Wausaukee  
 Rosemarie Rafath, Clintonville  
 Mark Reddel, St. Martin Luth., Clint.  
 Jack Rickaby, Hortonville  
 William Roberts, Sturgeon Bay  
 Gordon Rohloff, Oshkosh  
 Gladys Roland, Little Wolf  
 Ben Roloff, Howard-Suamico  
 Jack Rosenthal, Lourdes, Oshkosh  
 Kathryn Rowe, Appleton  
 Roger Roznowski, Southern Door  
 Mary Margaret Sauer, Menasha  
 Elmer Schabo, Niagara  
 Edwin Schaefer, Kaukauna  
 William Schaff, St. Joseph, Appleton

Arthur Schelk, Suring  
 Greg Schmitt, Cathedral, G.B.  
 Larry Schneider, DePere  
 Ron Schreier, Omro  
 Allan Schuh, Pulaski  
 Janet Serrahn, Sevastopol  
 Carolyn Stoehr, New London  
 Calvin Siegrist, Howard-Suamico  
 Peter Skroch, Oconto Falls  
 Mary Smith, Green Bay  
 Lee Smoll, Little Chute  
 David Soltesz, Crivitz  
 Bruce Sonnenberg, Neenah  
 Beverly Splitgerber, Green Bay  
 Wayne Splitgerber, Green Bay  
 Doris Stehr, Mt. Calvary Luth., Kimberly  
 Bill Stillion, Shawano  
 Ginger Stuvetraa, Oshkosh  
 Judy Sweedy, Denmark  
 Richard Switzer, Little Chute  
 Sr. Dorothy Marie Tappa, Xavier, Appl.  
 Nancy Tebo, Neenah  
 Jackie Thiry, Denmark  
 John Torgerson, Kewaunee  
 Clarence Trentlage, Freedom  
 Carol Trimmerger, Kewaunee  
 Jack Twet, Freedom  
 Tim Van Susteren, Holy Name, Appleton  
 Mary Wadzinski, Howard-Suamico  
 Marion Wagner, Gillett  
 Ruth Ward, Crivitz  
 Cathy Warnack, White Lake  
 Susan Weller, Green Bay  
 Dallas Werner, Kaukauna  
 Lila Wertsch, St. Margaret Mary, Neenah  
 Ruth Windmuller, Green Bay  
 Tom Weyers, Cathedral, Green Bay  
 James Wiza, DePere  
 Ralph Wohlt, New London  
 Warren Wolf, Kimberly  
 Peggy Wolfgram, Pulaski

## PREFACE

### PRIMARY TEACHERS:

Here's what you've been looking for!!  
Lessons & Activities in all capacities

to INTEGRATE

With ALL subjects.

NO extra planning.

NO extra lessons.

Use daily, whenever, wherever,  
the opportunity arises.

Slant this year's teaching  
toward ECOLOGY!

Help your class become

AWARE

of their WORLD.

We will need their HELP  
in PRESERVING it!

## DIRECTIONS FOR USING THIS GUIDE

This guide contains a series of episodes (mini-lesson plans), each containing a number of suggested in and out of class learning activities. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Further, each episode offers subject area integration, multi-disciplinary activities, where applicable, both cognitive and affective behavioral objectives and suggested reference and resource materials useful to the teacher and students.

1. This I-C-E guide is supplementary in design--it is not a complete course of study, nor is its arrangement sequential. You can teach environmentally within the context of your course of study or units by integrating the many ideas and activities suggested.

2. The suggested learning activities are departures from regular text or curriculum programs, while providing for skill development.

3. You decide when any concepts, objectives, activities and resources can conveniently be included in your unit.

4. All episodes can be adapted, modified, or expanded thereby providing great flexibility for any teaching situation.

5. While each grade level or subject area has its own topic or unit emphasis, inter-grade coordination or subject area articulation to avoid duplication and overlap is highly recommended for any school or district seeking effective implementation.

This total K-12 environmental education series is the product of 235 classroom teachers from Northeastern Wisconsin. They created, used, revised and edited these guides over a period of four years. To this first step in the 1,000 mile journey of human survival, we invite you to take the second step--by using this guide and by adding your own inspirations along the way.

## PROJECT I-C-E TWELVE MAJOR ENVIRONMENTAL CONCEPTS

1. The sun is the basic source of energy on earth. Transformation of sun energy to other energy forms (often begun by plant photosynthesis) provides food, fuel and power for life systems and machines.
2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.
3. Environmental factors are limiting on the numbers of organisms living within their influence. Thus, each ecosystem has a carrying capacity.
4. An adequate supply of clean water is essential to life.
5. An adequate supply of clean air is essential for life.
6. The distribution of natural resources and the interaction of physical environmental factors greatly affect the quality of life.
7. Factors such as facilitating transportation, economic conditions, population growth and increased leisure time influence changes in land use and population densities.
8. Cultural, economic, social, and political factors determine man's values and attitudes toward his environment.
9. Man has the ability to manage, manipulate and change his environment.
10. Short-term economic gains may produce long-term environmental losses.
11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.
12. Each person must exercise stewardship of the earth for the benefit of mankind.

A "Concept Rationale" booklet and a slide/tape program "Man Needs His Environment" are available from the I-C-E RMC to more fully explain these concepts.

# TABLE OF CONTENTS

Concept	Topic	Page No.
1	Plants and Seasons Table Dramatization Measuring Shadows	7 11 13
2	Living and Non-Living Things Living and Non-Living Interaction Creating Animals	15 17 19
3	Overpopulation Dodge Ball Balance of Nature	21 23 25
4	Water Uses Water Pollution Water Depletion	27 29 31
5	Need for Air Air Pollution What Are Some Ways People Are Hurting the Environment? Pollution Songs	33 35, 39 37 43
6	Animal Adaption Change in Use of Resources Leaf Texture Rubbings Effect of Forest Fires	45 47 49 51
7	Effect of Transportation Homes Snowmobiling Camping	53 55 57 61
8	Water and Weeds	63
9	Land Beautification Classroom Improvements Temperature Control Clay Project Overall Environment Design	67 69 71 73 75

Concept	Topic	Page No.
9	Diorama Low Organization Games Singing Games	79 81 83
10	Folktales Dramatization Air Pollution Multi Media	87 89 91
11	Littering Care of Property Fire Prevention Rhythmical Activities Recycling Dramatic Play	95 97 99 101 103, 105 107
12	Rights of Others Care of Books	111 115

Environmental:

Integrated with:

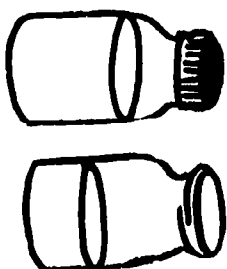
CONCEPT NO. 1 - EnergySUBJECT Science and ArtORIENTATION How Important Is the Sun's Energy?TOPIC/UNIT Plants and Seasons


BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Demonstrate at least two effects of the sun on plants and animal growth.	<b>Affective:</b>  Appreciate how much the sun affects us daily by defending it as being the most important factor necessary for plant and animal life.	<b>In-Class:</b>	<b>Outside or Community:</b>
<b>Skills Used:</b>			
1. Plant and observe growth.			
2. Keep a pictorial record of weather change.			
3. Make a crayon resist with a water-color wash.			

I. Science	I. Science
A. As introduction, ask questions about early morning sun.	A. If possible, gain access to a small plot of land and plant a garden in spring, or plant an indoor "garden".
1. What do we see in the morning?	
2. What does it do?	
3. How does it help us?	
Through discussion the children should realize that the sun brings light and warmth to the world.	
B. Demonstration: Two plants and one box are needed. Place in sunlight. Cover one with a box, leave other in direct sunlight. Compare results after 2 days. (Water both plants regularly).	
Ask: How does the sun affect plants?	
C. Chart: Seeds, and Plants They Become. Save package from seeds and use outer pictures. Also - plant seed in glass jar. On outside of jar, tape seed samples so child sees seed and plant.	

(Continued)

7

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:</p> <p>Science for Work and Play, Herman &amp; Nina Schneider</p> <p>Concepts in Science, Brandwein, Cooper, Blackwood, &amp; Hone</p> <p>The Sun, Our Nearest Star,</p> <p>Franklyn M. Branley, Crowell Co., 1961</p> <p>The Day We Saw the Sun Come Up, Goudey, Alice C. Schribner, Sons, N. Y. 1961</p> <p><u>Audio-Visual:</u></p> <p>Films:</p> <p>Food From the Sun, color, 10 min. (EBF) - BAVI 6742 \$4.75</p> <p>Planting Our Garden, color, 11 min. Coronet, BAVI 0515 \$4.00</p> <p>Filmstrips:</p> <p>Sun Up (Weston Woods Story Films)</p> <p>The Sun's Family</p> <p>Flannel Board</p> <p>Seasons by Instructo</p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>I. D. Experiment</p> <p>Put 2 jars with an equal amount of water in the sun. Cover one of the jars. After a few days ask the children questions about: What happened to the water in the uncovered jar? Use the term evaporation.</p>  <p>E. Discuss how eating fruit gives us energy from the sun.</p> <ol style="list-style-type: none"> <li>1. How does eating fruit give us energy?</li> <li>2. Does this energy come from the sun?</li> <li>3. How do you know if it does or doesn't?</li> </ol> <p>F. Place hand in direct sunlight and another in shade. Compare difference in temperature.</p> <p>G. Sun's rays create change. Place colored paper in sunlight. (Will fade.) What happens when you're out in sun. (Sunburn.)</p> <p>II. A. Art</p> <p>Draw seasonal picture with heavy crayon; use wash appropriate for season. <u>Example:</u></p> <p>white - winter</p> <p>yellow - summer</p> <p>orange - fall</p> <p>blue - spring</p> <p>B. Paper doll figures or flannel board. Dress with different clothes on rainy, sunny, and cold days. What different activities do you do when weather changes.</p> <p>(Continued)</p>

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p>	<p><u>CLASSROOM</u> (Continued) </p> <p>II.</p> <p>C. <u>Weather calendar:</u> keep track of the weather for the month. <u>Enumerate days of similar weather.</u></p> <p>D. Pin leaves to construction paper or hold down with small rocks, and place in bright sunlight. Let leaves remain in sun for an hour or longer. Remove leaves and find outlines on the paper. This is a very simple project to use in the concept introduced in Activity 7.</p>
<p><u>Audio—Visual:</u></p>	
<p><u>Community:</u></p>	

<b>Environmental:</b> <b>CONCEPT NO.</b> <u>1 - Energy</u> <b>ORIENTATION</b> <u>How Does the Sun Affect Us?</u> <b>TOPIC/UNIT</b> <u>Language Arts</u> <u>Table Dramatization</u>		<b>Integrated with:</b> <b>SUBJECT</b> <u>Language Arts</u> <b>TOPIC/UNIT</b> <u>Table Dramatization</u>	
<b>BEHAVIORAL OBJECTIVES</b> <b>Cognitive:</b> Demonstrate the effects of wind and sun by participating in a dramatization of the fable, acting the parts of the wind and sun.		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Affective:</b> Perceive the different effects the sun has on people. Demonstrate awareness of effect that different amounts of sun can have on the behavior of people by suggesting that the person's behavior was the result of too little sun, too much sun, etc.		<b>In-Class:</b> I. Language Arts A. Read the fable, "The Sun and the Wind". Dramatize. Ask: Who was the strongest? What can the sun and wind do for plants? When does the sun help us? When does the sun harm us? When does the wind help us? When does the wind harm us? B. After Thinking Time: Write a story, "The Sun Is My Friend". Illustrate. C. Complete the sentence: If the sun were my friend, I would.....Children may write answers or record them on tape. A spontaneous response in a discussion group could also be effective.	<b>Outside or Community:</b> I. Language Arts A. Thinking Time: Sit outside in a quiet place for 5 minutes. As you are sitting, think about these questions: Is it good to be here under the sun? How do you feel about yourself here? Would you like to come back? If you were an animal, would you like to be here? Or if you were a plant?
<b>Skills Used:</b> 1. Listening 2. Promote sensory image of how sun and wind feel and sound 3. Vocabulary			

10/11

**SUGGESTED RESOURCES****Publications:**

Fable - "Sun and the Wind"  
"Who Has Seen the Wind", by Rosetti  
"The Wind", by R. L. Stevenson  
Canticle of the Sun by St. Francis

**CONTINUED OR ADDED LEARNING ACTIVITIES****Audio-Visual:****Community:**

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> 1 - Energy		<b>SUBJECT</b> Math and Science	
<b>ORIENTATION</b> What Are Shadows?		<b>TOPIC/UNIT</b> Measuring Shadows	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b> Measure shadows and compare shadows of objects at various times of the day according to: a. Location b. Size c. Darkness  Identify the basic hour of the day and describe activities normally done at that hour, by the position and size of the shadows.		<b>In-Class:</b>  I. Science A. What things are done at each hour of the day? Discuss how hours of light influence what we do, what animals do, and what happens to plants.  B. Observe and discuss shadows. Sample question: What causes shadows? Use an electric light, a candle, a slide projector, flashlight, as well as the sun to develop them.	<b>Outside or Community:</b>  I. Math A. Measure shadows in the morning, at noon, in the afternoon.  Which shadow is longer? What causes your shadow to lengthen and shorten? What happens to your shadow at noon? Why? B. Have several children stand in a straight line. Mark the length of each child's shadow with a stick. Now measure each one. Will they all be the same number of inches or feet? Why not? C. Take a large sheet of wrapping paper outside. Place it on the sidewalk so that your shadow falls on it. Have another child trace around it. Now cut it out. Is your shadow picture as tall as you are? Is it shorter than you are? Measure to find out. (shorter, longer, etc.) Use mathematical terms. Where was the sun when your picture was being drawn?
<b>Affective:</b> Demonstrate awareness of way shadows are made, explaining how, describing and demonstrating a range of shadow darkness to others in the class or to his parents.			
<b>Skills Used:</b> 1. Telling time 2. Observation 3. Discussion 4. Comparison 5. Measuring			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:  <u>Shadows</u>  <u>What Makes a Shadow?</u>  <u>Describing and Classifying Measurement</u>  <u>Unit 4 Using Our Senses</u>  <u>Braydon, Lillian, Tell Me the Time,</u>  <u>Please, Philadelphia, Lippincott, '46</u>  <u>Francoise, What Time Is It Jean Marie?</u>  <u>N. Y. Schribner, 1963</u></p> <p><u>Audio—Visual:</u></p> <p>Movie, <u>Time for Clocks</u> (color)  \$4.00 BAVI 10 min.</p> <p><u>Community:</u></p>	<p><u>OUTSIDE ACTIVITIES</u> (Continued)</p> <p>I. Math</p> <p>Can you recognize your own shadow? Your friend's?  Have children indicate tallest, shortest, etc. (again  use mathematical terms)</p>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>2 - Ecosystem</u>		<b>SUBJECT</b> <u>Science</u>	
<b>ORIENTATION</b> <u>What Are Living Things?</u>		<b>TOPIC/UNIT</b> <u>Living and Non-living Things</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> List characteristics of a living thing.  Select names of living things when reading a list of living and non-living things.	<b>In-Class:</b>		<b>Outside or Community:</b>
	I. Science A. Observe fish in bowl. Place toy fish near bowl for comparison with live animal. Ask about live fish. Does it eat? Does it breathe? Does it move? Ask same questions about toy fish. Conclude: An animal is a living thing; a toy is not.		I. Science A. Go on walk to discover living things. Ask questions similar to those about fish & plants to determine if object is a living thing. At end of walk, make list of living things. Conclude: Plants and animals are living. All other things are non-living. What were the non-living things we saw? (rocks, soil, air, water)? B. On a nature walk, look for examples of how animals move, using such means as: wings fins spines tails scales legs muscles claws See how many ways of moving can be found: climbing flying jumping running sliding swimming crawling rolling borrowing
<b>Affective:</b> Demonstrate awareness of the interaction of life cycles by finding examples that will indicate this in a wooded or park area.		D. Experiment to show that living things move themselves and non-living things need some force to make them move. <u>Living Things</u> <u>Non-living</u> Venus flytrap Swing Plant in sunny Car window Chalk Sensitive plant Bottle (cont'd.)	
<b>Skills Used:</b> 1. Distinguish between living and non-living things. 2. Cooperating with other children when planning an environmental outing.			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:  <u>Soon After September: The Story of Living Things</u>, McGraw-Hill Co., New York  <u>Howell, Ruth, A Crack in the Pavement</u>, N. Y. 1970</p> <p><u>Audio—Visual:</u></p> <p>NEWIST television science series (2nd semester)</p> <p><u>Community:</u></p> <p>Nature Trail</p>	<p><u>CLASSROOM (Continued)</u></p> <p><u>I. D.</u></p> <p><u>Living Things</u></p> <p>Fish  Snake  People</p> <p>E. Perhaps you could show a slow-motion film to illustrate the opening of a flower blossom.</p>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>2 - Ecosystem</u>		<b>SUBJECT</b> <u>Science and Language Arts</u>	
<b>ORIENTATION</b> <u>What Do Living Things Need?</u>		<b>TOPIC/UNIT</b> <u>Living and Non-Living Interaction</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b> Make a three-part diagram to show interaction between plants and animals.  Describe the interaction between living and non-living things.		<b>In-Class:</b>  I. Science & language Arts A. Make a picture of a living thing. Choose magazine pictures to show all the things for survival. Ex. - dog - doghouse, food, water, air, love. Conclude that living things depend on other living things.  B. Make an experience chart. Use as a heading the name of a non-living thing. Together, children can write a story about how living things use and maintain the non-living. Example: car A car is used for travel. We wash and wax it. We fill it with gasoline and change its oil. We put air in the tires and take it to the garage for a checkup. Conclude that living things use non-living things.	<b>Outside or Community:</b>
<b>Affective:</b> Select other examples of animals and determine how they interact with their environment while out of the school setting.			
<b>Skills Used:</b> 1. Listening for information 2. Writing an informational article 3. Observing 4. Identifying		C. Recall nature walk & lists of living & non-living things. Ask: Do living things need non-living things?	

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:</p> <p><u>Puddles and Ponds</u> <u>Busch, Phyllis S.</u>, World Pub. Co. N. Y., 1969</p> <p><u>Birds</u> 130 In ICE <u>Booklet</u> of poems and pictures</p> <p><u>Audio-Visual:</u></p> <p>Discovering Your Environment KT 26 I-C-E</p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>I. * If nature walk from previous lesson has not been taken, it would be appropriate to take one now.</p> <p>D. Discuss why animals live in particular areas. (alligator, bear, raccoon, duck).</p> <p>E. On board put following examples:</p> <div data-bbox="894 1181 1085 2131"><pre>graph TD; Fox --&gt; Bunny; Grass --&gt; Bunny; BigFish[Big Fish] --&gt; LittleFish[Little Fish]; Seaweed --&gt; LittleFish;</pre></div> <p>Discuss interdependence shown. Children should make a diagram (use pictures instead of words) with their own examples.</p>

Environmental:

Integrated with:

CONCEPT NO. 2 - Ecosystem

SUBJECT Art and Social Studies

ORIENTATION How Can We Make an Ecosystem?

TOPIC/UNIT Creating Animals

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Identify differences and similarities that exist within the animal kingdom.  Explain how an ecosystem works in maintaining a balance of life and materials, and how plants and animals are interdependent.	<b>Affective:</b>  Question the faulty explanation as to why a given situation, in which the ecosystem is not balanced and cannot sustain itself in its present condition, will not continue indefinitely.	<b>In-Class:</b>	<b>Outside or Community:</b>
		I. Art	I. Social Studies
		A. Review some of underwater interdependence diagrams. Observe aquarium so children can see actual underwater life. Make crayon-resist underwater drawings with blue watercolor wash showing sea life.	A. Visit a local aquarium, tropical fish store or the home of a person having a tank of fish.
		B. Make clay animals.	B. Visit to a museum (such as the County Museum in Milwaukee) to view the dioramas of sea life.
		C. Using a mosaic technique, create forest animals--perhaps for a forest community mural.	
		D. Bag puppets - cover bag with construction paper. Add ears, whiskers, tail, detail (spots, stripes). etc.	
		E. Group project: Large painted animals. Students draw one large animal 3' tall and then paint with tempera.	
<b>Skills Used:</b>  1. Drawing 2. Mosaic Technique 3. Constructing large animals		(Continued)	

19

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Environmental Awareness ICE Kit 16</p> <p>"Colors in Nature"</p> <p>"Textures in Nature"</p> <p>"Patterns in Nature"</p> <p><u>Community:</u></p>	<p><u>CLASSROOM</u> (Continued)</p> <p>I. F. Mobile -- Animal faces created with cut construction paper on paper plate--both sides. Hang with string. Stress having things protrude from face. Curling, folding, tabs, cones and cylinders could be demonstrated.</p> <p>G. Zoo -- Each child will create one animal family and cage by cutting and pasting. Use thin strips for bars.</p>

Environmental:

Integrated with:

CONCEPT NO. 3 - Carrying Capacity

SUBJECT Social Studies and Physical Education

ORIENTATION What Does Carrying Capacity Mean?

TOPIC/UNIT Overpopulation

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
Define carrying capacity.		I. Social Studies	I. Physical Education
Demonstrate a procedure that will show that each set of conditions has its own carrying capacity.		A. Bulletin board "The City and Overpopulation". Make skyscrapers, homes, stores, vehicles, etc. Add <u>many</u> people from catalogs.	"A Hunting We Will Go". Children line up single file. First in line will become the hunter. Everyone behind become deer. Sing "A Hunting We Will Go, A Hunting We Will Go, Heigh-o! the Derry-oh! A Hunting We Will Go!" The line disperses when hunter yells "Bang." Hunter tags deer and they play dead.
Affective:		Discuss problems that will arise when overpopulation occurs.	Variations: a. More hunters b. Less hunting space Discuss how wildlife is affected when an area is overpopulated. a. Wildlife area restricted b. Too many hunters c. Too few animals
Skills Used:			II. Social Studies A. Visit some areas where carrying capacity is important. (elevator, car, small room, etc.) Find out what each of these places will hold. Count and record the number of people in each area.
1. Counting 2. Recording			

**CONTINUED OR ADDED LEARNING ACTIVITIES**

**Publications:**

**OUTSIDE ACTIVITIES** (Continued)

## II. A.

1. Find out how many people your school bus will hold. What happens if the bus is overcrowded?
2. What happens when too many children are using the playground at the same time? How many people does our playground hold?
3. What happens when too many children want to swim at the same time? How many people does a beach hold?

We call the number of people an area holds the carrying capacity. (use term "carrying capacity" in further discussions).

- B. Compare children's experiences of overcrowding with nature--when there are too many fish, some die; when there are too many frogs, some move out.

**Audio-Visual:**

**Community:**

Environmental:

Integrated with:

CONCEPT NO. 3 - Carrying CapacitySUBJECT Physical Education and Social StudiesORIENTATION Limits are set on the number of organisms in a place.TOPIC/UNIT Dodge Ball

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Play the game of Dodge Ball under given conditions that limit his performance and demonstrate type of adaptation needed to participate in the activity under these conditions.	<b>In-Class:</b>  I. Social Studies A. Take all the children into a small room which will be overcrowded. After a few minutes, ask them how they feel in this space. Also ask why.	<b>Outside or Community:</b>  1. Social Studies A. Take the children to a large room, a dining hall, gymnasium, church, etc. After a while, ask how this space makes them feel and why.	
<b>Affective:</b>  Continue to explore types of spaces on his own and locate and describe these that:  a. Make him feel comfortable. b. Uncomfortable. c. Scared. d. Joyful.	<b>II. Physical Education</b> A. Teacher explain that we are going to play a ball game today. The name of the game is Dodge Ball. While some of us try to tag others with the ball, the others must try to keep away from the ball. You'll need two groups, taggers and dodgers. The "taggers" form a circle inside which the "dodgers" stand loosely around. The "taggers" continuously keep throwing the ball at the "dodgers", keeping it below waist level to avoid accidents. The "dodgers" keep trying to avoid the ball and must join the circle of "taggers" if the ball so much as touches them.		
<b>Skills Used:</b>  1. Quick body movement to develop eye-hand-feet coordination.	(Continued)		

23

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Nicks, Mei, <u>Curriculum for Elementary Physical Education</u>, Diocesan Dept. of Education, Green Bay, Wisconsin</p> <p><u>Audio—Visual:</u></p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>II. Physical Education</p> <p>B. Vary the grouping after each game:</p> <ul style="list-style-type: none"> <li>- boys be dodgers</li> <li>- girls be dodgers</li> <li>- those wearing red</li> <li>- those wearing blue</li> <li>- those wearing yellow</li> <li>- those wearing brown</li> </ul> <p>C. Startle them by asking everyone to join the circle of taggers. Then ask them to go ahead and play the game again. Is it possible? Why not?</p> <p>D. Continue discussion after this fashion:</p> <ul style="list-style-type: none"> <li>- How did you feel when the largest group was inside the circle?</li> <li>- How did you feel when the smallest group was inside the circle?</li> <li>- How did you feel as more and more people had to join the circle formation? Did you have more space for moving at the beginning of a new game or near the end when nearly everyone was tagged out?</li> </ul>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b>	3 - Carrying Capacity	<b>SUBJECT</b>	Physical Education
<b>ORIENTATION</b>	How Does Man Affect the Balance of Nature?	<b>TOPIC/UNIT</b>	Balance of Nature
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Orally give examples of effects of both wildlife imbalance and man on the environment in terms of food available.		<b>In-Class:</b>	<b>Outside or Community:</b>
		<p>I. Physical Education  A. The Formation: 2 lines - 20', 40', or 50' apart. Players on one line, chaser in the center.  1. Players are named for different animals: rabbit, fox, bear, tiger, moose.</p> <p>2. Chaser calls name of any animal he chooses. Ex. "deer!" All players who are deer run to opposite end of gym or playground. Chaser tries to tag them. Any player caught takes the part of chaser. The original chaser becomes another animal, thus having eliminated one or more of a certain species. The new chaser or chasers then all call on another group of animals.</p> <p>3. Modify game by creating an imbalance in numbers and discuss effects.</p>	
<b>Affective:</b>  Demonstrate awareness of man's influence on the balance of nature by presenting examples that he has seen that: <p>a. help keep the balance of nature  b. destroy the balance of nature</p>			
<b>Skills Used:</b>  1. Locomotor skills a. running b. tagging c. dodging			

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>"Animal Predators and the Balance of Nature", BAVI, 11 min., color</p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>I. Physical Education</p> <p>B. The following games can be used to show carrying capacity - for first graders. eg. for the game suggested. It can be discussed in relation to hunter's quotas - when there are too many hunters the species is endangered.</p> <p><u>Hunter</u></p> <p>One person is the "Hunter". The rest of players stand in a straight line. Each player chooses the name of a wild animal. The "Hunter" starts walking and calls the name of an animal. The players who have chosen that animal fall in line behind the "Hunter". When the "Hunter" has called four animals, he then calls, "Let's all go hunting." Rest of players fall in line. The "Hunter" suddenly shouts "Bang!" and all players attempt to get back to the starting line without being tagged. All those tagged are "shot" and are out of the game until "Hunter" has had three turns.</p>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>4 - Water</u>		<b>SUBJECT</b> <u>Science, and Social Studies</u>	
<b>ORIENTATION</b> <u>How Do We Use Water?</u>		<b>TOPIC/UNIT</b> <u>Water Uses</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
<p>Draw three pictures of water use.</p>		<p>I. Science</p> <p>A. Show pictures of the many places in the world where water is found (ocean, lake, pond, river). Point out bodies of water on globes, and on an assortment of maps.</p> <p>1. Give each child world map and U. S. map.</p> <p>2. Color water blue and land green.</p>	<p>I. Social Studies</p> <p>A. Tour school building and follow with discussion: kitchen, restroom, sinks, drinking fountains, janitor's room, etc. Places where water is essential.</p> <p>B. Take children on planned trip to visit the source of water supply from their town. On return to the school, teacher writes down why pure water is needed. And also how we get our water.</p>
<p><b>Affective:</b></p> <p>Conscious of the importance of water in his life by finding examples of ways in which he uses water for:</p> <p>a. his own physical needs and well-being</p> <p>b. for pleasure</p> <p>c. for aesthetic values</p>		<p>B. Ask: Why do you think there is so much water in the world?</p> <p>C. Discuss and illustrate different ways in which animals use water; eg., frogs, birds, fish, deer, and snakes.</p> <p>D. Discuss and illustrate how each child likes to use water. Write a story called "Water Is Important".</p> <p>E. Compare use of water in summer with use in winter.</p> <p>a. swimming pools</p> <p>b. ice skating rink</p>	
<p><b>Skills Used:</b></p> <p>1. To differentiate difference of land from water on maps and globes</p> <p>2. Drawing</p> <p>3. Observation</p>			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>The First Book of Water by Joe Noring  <u>Willly, The Story of Water</u> by  Jerome Spar  Rain, Rain, Rivers by Shulrutz  The Magic of Water, New York,  Charles Scribner's Sons, Inc.  Good Rain by Goudey  Not Only for Ducks, The Story  of Rain, McGraw-Hill Co., N. Y.  Things Around You, Steck-Vaughn  Co., Science Series, ICE 500 WA2</p> <p><u>Audio—Visual:</u></p> <p>Pictures:  SCS or Picture File -  clear stream  people fishing in farm pond  water recreation.</p> <p>Films:  We Explore the Stream - Coronet  Photographs from SCS or local  water control company.  Water-How Water Helps Us, BAVI  Your Friend, the Water, 6 min.,  Film 510 Still Waters ICE-RMC</p> <p><u>Community:</u> (CONTINUED)</p>	<p><u>AUDIO-VISUAL</u> (Continued)</p> <p>F-181-D 11 min. (IMC)  Adventures of Junior Rain Drop, BAVI,  #0022 10 min., Color.  Your Friend the Water - Clean or Dirty,  color, 6 min. (EBF) BAVI</p>

Environmental:

CONCEPT NO. 4 - Water

ORIENTATION What Is Water Pollution?

Integrated with:

SUBJECT Phy. Ed., Social Studies, Science & Art

TOPIC/UNIT Water Pollution

BEHAVIORAL OBJECTIVES

Cognitive:

Identify at least one sign of pollution observed on a field trip.

In-Class:

STUDENT-CENTERED LEARNING ACTIVITIES

Outside or Community:

I. Art

A. What happens to nice clean rain?

I. Social Studies

A. Environmental Protection Agency

Region VII

911 Walnut

Kansas City, Mo. 64106

B. Ask for:

The Adventures of Walter

Raindrop

Take a field trip to

nearby stream or river and

look for signs of water

pollution. At this time,

water samples could be

procured.

C. Write to:

Environmental Protection

Agency

Office of Public Affairs

1 North Wacker Drive

Chicago, Illinois 60606

Ask for:

Needed: Clean Water

Problems of Pollution

(you may be able to get

enough for entire class)

Affective:

Demonstrate that their help is needed in maintaining a pure water supply by preparing an experiment or demonstration which indicates ways that humans can help in maintaining a pure water supply.

II.

A. Science

Experiment with water mixed with the following: soil, oil and detergents. What happens when it stands for a while?

B. After visiting a stream,

discuss ways that water pollution could have been prevented.

C. Collect water in little jars

get from various sources and let them set to see the sediment.

Skills Used:

1. Oral answering
2. Making a collection
3. Water color painting

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Pamphlet - Needed: <u>Clean Water Wisconsin Dept. of Natural Resources</u>, P. O. Box 450, Madison, Wisconsin 53701</p> <p><u>Audio-Visual:</u></p> <p><u>The Muddy Raindrops</u> - SVE 430-6 \$5.50 ) <u>Water Pollution</u> 614.7 filmstrips: ) <u>Green Bay Public Library</u> ) Film: <u>The Stream</u>, ICE (320) 15 min. <u>Ecology Kit</u>: Can I Drink the Water, 1971 - Urban Systems, Inc.</p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>II. Science</p> <p>D. Display jars of polluted water and one jar of clean water. Discuss which children would like to drink and how water gets polluted.</p> <p>E. How do families pollute water and how can we reduce pollution? harsh detergents chemicals (Drano) grease (fats) dyes sewage</p> <p>III. Physical Education</p> <p>A. <u>UNCLE SAM</u>. Game</p> <p>Divide the play area by 2 goals. Children are divided into polluters. One child is selected as Uncle Sam. He stands in the middle. Children call, "Uncle Sam, Uncle Sam, may we cross your polluted dam"? Uncle Sam replies, "Yes, you may if you are a coke bottle." They get a free run across. Those not mentioned remain on the line until Uncle Sam calls, "Go". They must cross the opposite end without being caught. If caught he goes to sideline; after 3 turns Uncle Sam chooses someone who is not caught to take his place. (Boys pick girls and reverse). When new "It" is chosen, all those caught return to game.</p> <p>After children have played the game they may be able to choose more names of polluters and may wish to wear a label of a common polluter. Suggested list of polluters: paper, cans, cars, trucks, planes, factories, homes, garbage, and rubbish.</p>

<b>Environmental:</b> <b>CONCEPT NO.</b> <u>4 - Water</u> <b>ORIENTATION</b> <u>How Much Water Do We Need?</u> <b>SUBJECT</b> <u>Language Arts and Social Studies</u> <b>TOPIC/UNIT</b> <u>Water Depletion</u>		<b>Integrated with:</b>	
<b>BEHAVIORAL OBJECTIVES</b> <b>Cognitive:</b> List things that would be impossible without water.		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b> <b>In-Class:</b> I. <u>Language Arts &amp; Social Studies</u> A. Show pictures of places where there isn't water (desert, tundras). Make bulletin board of above pictures. B. To see if water is essential, the children will not use any water for a given amount of time. Children will list all things that were impossible without water. Children will tell story about: 1. how they felt when they couldn't use water 2. why he needs water C. What would the ocean bed look like without water? Students should draw their ideas. Would it be cracked? Would there be any plants or animals? How would these look?	
<b>Affective:</b> Show awareness of the need for pure water for plant and animal life by giving water to plants and animals in the classroom. Defend the need for pure water for plants and animals with examples.		<b>Outside or Community:</b>	
<b>Skills Used:</b> 1. Listing 2. Story-telling 3. Writing			

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Audio—Visual:

Community:

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> 5 - Air		<b>SUBJECT</b> Language Arts, Phy. Education & Science	
<b>ORIENTATION</b> Why Do We Need Air?		<b>TOPIC/UNIT</b> Need for Air	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Describe ways in which we can determine the characteristics of air.  a. takes up space b. colorless c. supports life	<b>In-Class:</b> I. Science A. Ask: When can we feel air? Does it feel different in summer and winter? What's in the air around us? Amount of discussion will depend on previous knowledge of children. This will be a good review of science unit on air. B. Experiment: Child pinches nose and closes mouth while teacher counts to 10. Child tells how he feels without supply of air. Or else, tell the child to hold his breath for as long as he can. C. Child feels his own body for his ribs and notices how chest expands when inhaling; contracts when exhaling. D. Place jar over lighted candle and observe and discuss results. E. Mural: "We Need Air." Include animals, people, and plants.	<b>Outside or Community:</b> I. Physical Education A. Invite a physical education teacher to exercise with children and emphasize the importance of a good air supply. B. Physical exercises: walking, hopping, skipping, running, galloping, tiptoeing, sliding, etc. Faster exercises use more energy and child breathes faster.	
<b>Affective:</b> Show an appreciation of clean air in everyday living by making posters that tell people about the need for clean air.			
<b>Skills Used:</b> 1. Draw	(Continued)		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>Audio-Visual:</u></p> <p>6290 Air Around Us, color, 12 min., John Colburn, B&amp;W Filmstrips: Ocean of Air We Live In <u>True Book of Your Body and You</u></p> <p><u>Community:</u></p> <p>Physical Education Teacher</p>	<p><u>CLASSROOM (Continued)</u></p> <p>II. Language Arts and Art</p> <p>A. Read and illustrate. Look around! A kite is flying, On the line the clothes are drying. We can't see air, but we feel it blow, We must breathe air to live and grow.</p>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> 5 - Air		<b>SUBJECT</b> Social Studies, Science	
<b>ORIENTATION</b> What Is Air Pollution?		<b>TOPIC/UNIT</b> Air Pollution	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b>  Through experiments, the child will demonstrate that air normally contains some impurities and moisture.	<b>In-Class:</b>  I. Science A. To show that air is not clean, dust the top of a table or piano in morning. Put a book on its top. Check to see difference at end of day, second day, etc.  B. Hold metal spoon over candles. Observe carbon. What's going into the air" (smoke, chalk dust, fumes)  C. Bring in a strong smelling plant and discuss natural air pollutants.  D. Find pictures from magazines, of things that produce odors: matches, bathroom spray, car and truck exhaust, flowers, barnyard manure, cooking foods like sauerkraut, gasoline, charcoal with a grill, bubble baths. Make a two-section chart: Pleasant odors Unpleasant odors	<b>Outside or Community:</b>  I. Social Studies A. Environment Walk: See Worksheet on next page.  B. Cover a picture frame or cardboard frame with cheese cloth. Hang it in a tree and observe the things that catch onto it.  C. Contact local hospital for free surgical masks for children to use for 1/2 day to dramatize living in polluted air.  D. Write to: Environmental Protection Agency Office of Public Affairs 1 North Wacker Drive Chicago, Illinois 60606 Ask for: <u>Clean Air</u> Needed:	
<b>Affective:</b>  Make suggestions as to how he can contribute to cleaner air.			
<b>Skills Used:</b>  1. Experiment and think.			

35

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:</p> <p><u>People and Their Environment</u></p> <p><u>Teachers' Curriculum Guide to</u></p> <p><u>Conservation Education, Grades 1-3</u></p> <p><u>Let's Find Out What Is in the Air</u></p> <p>read to class.</p> <p><u>A Place to Live, National</u></p> <p><u>Audubon Society</u></p> <p><u>1130 Fifth Avenue</u></p> <p><u>New York, New York 10028</u></p>	
<p><u>Audio-Visual:</u></p> <p>Films:</p> <p><u>Air Is All Around Us</u></p> <p><u>Air and What It Does</u></p> <p><u>Ecology</u></p> <p><u>The Pollution Problem</u></p> <p><u>Teaching Pictures Written by</u></p> <p><u>Dr. Rillo ICE</u></p> <p><u>Environmental Activity Cards, Kit 40,</u></p> <p><u>ICE</u></p>	
<p><u>Community:</u></p> <p>Local hospital</p>	

1. Air Pollution:

1. Stand outside your school. Look all around. Check all of the places you can see that air pollution is coming from:

\_\_\_\_\_ factories

\_\_\_\_\_ buses

\_\_\_\_\_ apartment houses

\_\_\_\_\_ airplanes

\_\_\_\_\_ cars

\_\_\_\_\_ fires

2. Describe the sky. Is it clean? \_\_\_\_\_yes \_\_\_\_\_no

Is it hazy? \_\_\_\_\_yes \_\_\_\_\_no

Is it darker in some parts than others? \_\_\_\_\_yes \_\_\_\_\_no

3. Can you smell the air? \_\_\_\_\_yes \_\_\_\_\_no

4. Do your eyes tear or smart? \_\_\_\_\_yes \_\_\_\_\_no

If possible, watch a bus leave a bus stop.

Can you see the exhaust? \_\_\_\_\_yes \_\_\_\_\_no

Can you smell the exhaust? \_\_\_\_\_yes \_\_\_\_\_no

5. Try to collect some pollutants.

a. Wipe a car with a tissue. Paste a piece of the tissue below.

b. Wipe a window ledge with a tissue. Paste a piece of the tissue below.

c. Go to a tree near a bus stop. Wipe a leaf with a tissue. Paste a piece of tissue below.

d. Go to a tree as far away as possible from bus stops and heavy traffic. Wipe a leaf with a tissue. Paste a piece of tissue below.

6. Sandpaper a small section of the stones on the outside of the school building.

Is there a difference in color? \_\_\_\_\_yes \_\_\_\_\_no

7. If there is snow on the ground, what color is it? \_\_\_\_\_white \_\_\_\_\_gray

How long ago did the snow fall? \_\_\_\_\_today \_\_\_\_\_yesterday \_\_\_\_\_a few days ago.

## II. Litter:

Examine the litter under a tree, on the grassy strip between the sidewalk and the street, or in a vacant lot. Check the things you find. Some of these things will come apart soon. Some will last a long time and make the ground ugly. Draw a line from each thing you found to the right group.

### GROUP 1

Things that will  
make soil soon:

### GROUP 2

Things that will not  
make soil soon.

newspapers  
cans  
glass  
soda can tabs  
foil  
candy wrappers  
cigarettes

<b>Environmental:</b> <b>CONCEPT NO.</b> <u>5-Air</u> <b>ORIENTATION</b> <u>What Is Air Pollution?</u> <b>SUBJECT</b> <u>Language Arts and Art</u> <b>TOPIC/UNIT</b> <u>Air Pollution</u>		<b>Integrated with:</b>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> <p>Write a story containing at least 3 words from the dictionary on pollution, in the proper definitional use.</p>	<b>In-Class:</b> <p>I. Language Arts  A. Dirty Words  Make a dictionary of pollution words. Make up your own title for your dictionary.  B. Write a story, entitled: There's Something in the Air!  C. Role Playing - What if you're a growing apple or a flower in bloom in polluted air? Express this feeling, tell your friend, write a poem or story.  Draw a picture or dance it out.  D. Paint an outdoor scene.  Discuss what would happen to it if the air became polluted. Overlay a piece of gray tissue paper to create this polluted air effect.  Discuss what effect this has on the colors and details in the painting.</p>	<b>Outside or Community:</b> <p>I. Art  A. Make a smoke print as a class project to show that burning produces pollution. Take a large sheet of typing paper and grease surface lightly with a little lard. Light candle and smoke-greased paper by moving it quickly back and forth over the flame. When the surface is black with soot, place soot side of paper up and put leaf, vein side down, on the blackened surface.  Cover leaf with another piece of paper and rub until leaf is inked thoroughly with soot and grease. Lift leaf and place soot side down on another piece of paper. Rub the leaf. Remove to see print.</p>	
<b>Affective:</b> <p>Demonstrate the feeling of the importance of clean air by creating a story having an example of the effect of unclean air or clean air, which can be told or presented to other class members.</p>			
<b>Skills Used:</b>			

BEST COPY AVAILABLE

46/41

Big bus at the bus stop.

Ready to go again.

Big noise.

Big cloud of

aargh      gulp  
cough  
gasp      retch      strangle  
shudder      wheeze  
sniffle      katchoo  
chuglughug

<b>Environmental:</b>	
<b>CONCEPT NO.</b>	5 - Air
<b>ORIENTATION</b>	Can We Write Pollution Verses to Songs? <b>TOPIC/UNIT</b> Music, Physical Education and Art
<b>BEHAVIORAL OBJECTIVES</b>	
<b>Cognitive:</b>	<p>Write lyrics dealing with air pollution to fit the rhythmic patterns for a given known melody.</p>
<b>Affective:</b>	<p>Participate in creating a song or poster illustrating the need for clean air.</p>
<b>Skills Used:</b>	<p>1. Writing lyrics</p>
<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>In-Class:</b>	<p>I. Music</p> <ol style="list-style-type: none"> <li>A. Review a familiar song.               <ol style="list-style-type: none"> <li>1. Blue Tail Fly</li> <li>2. My Bonnie Lies Over the Ocean</li> <li>3. Where, O Where Has My Little Dog Gone</li> <li>4. Twinkle, Twinkle, Little Star</li> <li>5. London Bridge Is Falling Down.</li> </ol> </li> <li>B. Discussion related to air pollution listing responses on the board.               <ol style="list-style-type: none"> <li>1. What do you like about clean air?</li> <li>2. What do you like about the blue sky?</li> <li>3. What does polluted air look like?</li> <li>C. Write new words to the familiar melody - along the line of air pollution.</li> </ol> </li> </ol> <p>II. Art</p> <ol style="list-style-type: none"> <li>A. As a follow-up to the music lesson:               <p>Create a poster to communicate why we need clean air; use all cut or torn letters, substitute magazine pictures for some letters or words.</p> </li> </ol>
<b>Outside or Community:</b>	<p>I. Physical Education</p> <ol style="list-style-type: none"> <li>A. Play "Here Comes 3000 Men to Work" only adapt to "Here Comes 3000 Men to Pollute".</li> </ol>

**SUGGESTED RESOURCES****CONTINUED OR ADDED LEARNING ACTIVITIES****Publications:****Audio—Visual:****Community:**

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Science, Social Studies and Language Arts

ORIENTATION How Do Animals Choose an Area?

TOPIC/UNIT Animal Adaption

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		I-I-Class:	Outside or Community:
Give an example of a plant-- animal that indicates the ability of a living thing to adapt to changes in its environment.		<p>I. Language Arts</p> <p>A. Ask: why did dinosaurs become extinct? Relate to survival needs and adaptation.</p> <p>B. Read stories about plants and animals. Tell why plant or animal lives in a particular area.</p> <p>1. Why are there no elephants in Wisconsin?</p> <p>2. Why are there no polar bears in Africa?</p> <p>3. Why are there no palm trees in Wisconsin?</p> <p>4. Why are there no fish in the desert?</p> <p>C. Show pictures of many kinds of vegetables, fruits, and cereals. Choose those that grow in community. Where do others grow? Why?</p> <p>Make a booklet of:</p> <p>1. Fruits growing in community and those shipped in all the time or part of the time.</p> <p>2. Same as (1) but use vegetables.</p> <p>3. Same as (1) but with flowers.</p>	<p>I. Social Studies</p> <p>A. Visit school yard or neighborhood areas which show swamps, drainage ditches, sand hills, etc. On trip compare what grows in each area.</p>
<p>Give one example of a plant or animal that indicates that living things usually live where their needs are provided best.</p> <p><b>Affective:</b></p> <p>Value the need to preserve and protect animal and plant species in all areas by not destroying plants or animals while on a school field trip:</p> <p>a. Not killing animals or plants.</p> <p>b. Not destroying nests or houses of animals.</p> <p>c. Not playing with baby animals.</p>			
<p><b>Skills Used:</b></p> <p>1. Observation</p> <p>2. Cause-effect</p> <p>3. Discussion</p> <p>4. Analysis</p>			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>Rabbit Hill</u> by Robert Lawson <u>Listen, Rabbit</u> by Fisher <u>A Small Lab</u> by Keith <u>You and the World Around You</u> by Selsam <u>A Crack in the Pavement</u> by Ruth Howell</p> <p><u>Audio-Visual:</u></p> <p><u>Our Wonderful Woodlands</u> FS ST 7 <u>Filmstrip and cassette and comic booklet</u> <u>Why Plants Grow Where They Do</u>, Coronet, 11 min., BAVI <u>Filmstrip: Animals of the Forest Series</u>, McGraw-Hill, ICE FS St8 (5 filmstrips)</p>	<p><u>CLASSROOM (Continued)</u></p> <p>II. Science</p> <p>A. Mural: Fall - make in the fall season, winter in winter, etc. Put in general characteristics. Link up seasons with animal life - how seasons affect animal life (bird migration, hibernation, shedding of hair, building homes, storing of food).</p> <p>B. Compare weather in different areas of the U. S. (newspaper, radio, TV) Booklet: Animals. Group animals in Jungle, Cold Land, Desert, Temperate-- label each.</p> <p>C. Make a terrarium to show plants that are native to the area. Add a plant (as cactus) that is not native. Observe results: discuss results as related to geographic and climatic conditions.</p> <p>D. Set up an aquarium to demonstrate which animals live best in/near water (frog, turtle, goldfish).</p>

Community:

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Social Studies

ORIENTATION How Has Our Use of Resources Changed?

TOPIC/UNIT Changes in Use of Resources

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:	In-Class:	Outside or Community:
<p>Construct or illustrate a village of long ago including the natural resources of wood, trees, cabins, animal skins, etc.</p> <p>Explain how our living habits have changed in the last couple of centuries.</p>	<p>I. Social Studies</p> <p>A. How does a city become a city? (People chopped down trees and built log cabins, more people came, inventions changed us and our land.</p> <p>B. Compare free time activities of long ago to free time activities today.</p> <p>C. Discuss the effect of natural resources on the migration of early settlers:</p> <ol style="list-style-type: none"> <li>1. The gold rush</li> <li>2. Lumber industry</li> <li>3. Fur trade</li> </ol> <p>D. Discuss the abuse of natural resources and how it affected our life today.</p> <ol style="list-style-type: none"> <li>a. Gas shortage</li> <li>b. Extinction of animal species</li> </ol> <p>E. Bring in antiques and their modern counterpart. Discuss and compare how antique appliances required more muscle activity and new modern appliances use our supply of natural resources; eg. hand mixer vs. electric mixer.</p>	<p>I. Social Studies</p> <p>A. Invite old residents to give short talk or to answer questions about the "old days".</p> <p>B. Have manufacturer of wood products in the area talk about how trees are used.</p>
<p><b>Affective:</b></p> <p>Demonstrate awareness of abuses in managing natural resources by identifying examples while on a trip or from pictures.</p>		
<p><b>Skills Used:</b></p> <ol style="list-style-type: none"> <li>1. Make a mural</li> <li>2. Discussion</li> <li>3. Cause-effect thinking</li> </ol>		

**SUGGESTED RESOURCES****CONTINUED OR ADDED LEARNING ACTIVITIES****Publications:****Audio—Visual:**

"Boonsville" ICE (400)  
Man and His Environment  
ICE Simulation Game #4

**Community:**

State Historical Society for  
information on local areas.

Environmental:

CONCEPT NO. 6 - Resources

ORIENTATION Can We Make a Design Using Nature?

Integrated with:

SUBJECT Art

TOPIC/UNIT Leaf Texture Rubbings

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:	In-Class:	Outside or Community:	
Explain ways in which nature has served as an inspiration for man's artifacts, in realistic, decorative or abstract styles.	I. Art A. Discuss where leaf designs are seen other than in nature. 1. Textiles (fabric prints) 2. Wallpaper 3. Ceramic designs  B. Process: 1. Wedge clay 2. Roll out 1/4 to 3/8" thick 3. Press leaf into clay to gain leaf texture 4. Trim away excess clay 5. Bend edges and stem if desired 6. Pierce hole through stem to hand leaf upon completion. 7. Let dry 8. Bisque fire 9. Add glaze, fire again	I. Art A. Gather leaves outside.  1. Texture rubbings. Make a variety of crayon rubbings from nature. Using rubbings, cut out suggested shapes (e.g. tree texture, a tree cross-hatch texture body of a fish, rough stipple texture, a snail, etc.) Glue these shapes to a background piece of paper to create a picture.  2. Develop a design consisting of six or seven related shapes.  3. Create textured patterns by using various combinations of pen strokes. (cross-hatching, stippling, variations and combinations.)	
Affective:			
Demonstrate appreciation of design in nature by choosing a design from nature when asked to make a design. Examples: Leaf or cobweb.			
Skills Used:			
1. Properties of clay 2. Basic hand methods of working with clay.			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>A Ceramic Leaf, Today's Art, School Ed., Vol. 17 #12</u>  <u>Clay Is Fur, R. G. Yoder, School Arts</u>  <u>Ecological Ceramics, C. Heiple, Arts and Activities 69:29-31</u>  <u>March '71</u>  <u>Ceramics for Beginners, Arts and Activities, June '67</u>  <u>Clay in the Curriculum, Arts and Activities, March '70</u>  <u>Sand Casting for 6-Year-Olds, Arts and Activities, Feb. '72</u>  <u>Audio-Visual: (Continued)</u></p>	<p><u>PUBLICATIONS: (Continued)</u></p> <p><u>Ecological Ceramics, Arts and Activities, March '71</u>  <u>Clay Mushrooms, Arts and Activities, March '71</u></p>

Community:

Environmental:

Integrated with:

CONCEPT NO. 6 - Resources

SUBJECT Language Arts, Social Studies & Phy. Education

ORIENTATION What Does a Forest Fire Do?

TOPIC/UNIT Effect of Forest Fires

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
Describe three effects of our vanishing forests.		<p>I. Language Arts</p> <p>A. Discussion about pictures of forest fires. Let them focus their discussion on the plight of the animal in the vanishing forests. The discussion could also talk about other effects on our forest; as a needed resource for wood products, farm land, expansion of cities, expansion of leisure time facilities, etc.</p>	<p>I. Social Studies</p> <p>A. Have a forest ranger speak to the class. (Contact County Court House.)</p> <p>B. Collect pictures showing a contrast between a beautiful forest and one burned down. Trees Animals, etc.</p> <p>II. Physical Education</p> <p>A. Game illustrates the plight of the animal searching for a home. <u>Squirrels and Trees</u></p> <p>1. Players in groups of three with hands clasped together, forming a tree. One squirrel is placed in each tree. One odd squirrel is without a tree.</p> <p>2. The "It" person is the fox and chases the squirrel. The squirrel reaches safety when he takes a tree and the other squirrel must run. If he is caught, he changes roles with the</p>
Affective:			
Show concern about the loss of forests as a natural resource by participating in a discussion in which the loss of forests is the topic.			
Skills Used:			
<ol style="list-style-type: none"> <li>1. Running</li> <li>2. Tagging</li> <li>3. Dodging</li> <li>4. Fair play</li> </ol>			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>Smokey the Bear Storybook</u>, I-C-E - RMC</p> <p><u>Audio-Visual:</u></p> <p><u>4635 Our Natural Resources</u>, 11 min., color, Dowling, BAVI \$3.75</p> <p><u>Community:</u></p>	<p><u>OUTSIDE ACTIVITIES</u> (Continued)</p> <p>II. Physical Education</p> <p>A. 2. fox and becomes the catcher.</p> <p>3. When a new squirrel enters a tree, rotate with a part of the tree; therefore, letting everyone have a chance to run.</p>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>7 - Land Use</u>		<b>SUBJECT</b> <u>Art, and Social Studies</u>	
<b>ORIENTATION</b> <u>Transportation</u>		<b>TOPIC/UNIT</b> <u>Effect of Transportation</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
Identify which of two given types of transportation is the more recent.		<p>I. Art</p> <p>A. Create a simple collage by gluing yarn or string onto paper or tagboard in design representative of highway patterns seen on maps, films, or outside on field trips.</p>	
Determine which form of transportation is better than others in a given situation and give reasons for the selection.		<p>I. Social Studies</p> <p>A. Display pictures of transportation modes: Ex.: horse &amp; wagon Model T New car Ex.: Pirate ship Ocean cruiser</p> <p>Children should put each set of pictures in chronological order.</p>	
Affective:		<p>II. Social Studies</p> <p>A. Display pictures of transportation modes: Ex.: horse &amp; wagon Model T New car Ex.: Pirate ship Ocean cruiser</p> <p>Children should put each set of pictures in chronological order.</p>	
Demonstrate awareness of the different types of transportation and how he can use them by identification of types and uses while he is on a trip.		<p>B. Children tell what they do with their leisure time. Ask what their mom and dad do for hobbies.</p> <p>C. Write a class story about going on a trip if they were pioneers. (Covered wagons, horseback, horse and buggy, walking, stagecoach, etc.)</p>	
Skills Used:		<p>D. Visit city park to see facilities for young and old. Notice residential area and back yards. Why are parks necessary?</p> <p>E. Field trip to area with highway, preferably one with turnout, interchanges or cloverleaf. Have class bring in highway maps and observe patterns.</p>	
<ol style="list-style-type: none"> <li>1. Listing</li> <li>2. Discussions</li> <li>3. Community studies</li> <li>4. Comparisons</li> </ol>			

## SUGGESTED RESOURCES

### Publications:

### Audio—Visual:

#### Films:

Transportation: Footpath to Air  
Lana, color, 16 min., B&W  
Churchill  
Children at Work and Play Around  
the World, B&W, 20 min., B&W  
United World  
America, the Beautiful, color,  
20 min. B&W

### Community:

## CONTINUED OR ADDED LEARNING ACTIVITIES

### CLASSROOM (Continued)

#### II. Social Studies

- C. Would it take longer to travel? How would you take care of the horses?
- D. Talk about resort towns such as Door County has. Why do people like to vacation there? (It is away from the city, to do leisure time activities--boating, picnics photography, swimming, water skiing, hiking, fishing). What activities take place during winter, fall and spring?
- E. Compare schools of today and long ago. (Long ago--all eight grades, within walking distance of home, furniture, etc. Now--bus transportation, one grade per room, audio-visual equipment, furniture). Take tour of school building and audio-visual department.
- F. What brought about the change in travel?
  1. Desire to explore new lands
  2. Desire to move supplies further, faster.
  3. Inventions that brought about machines and vehicles to propel man faster and further.

As machines were developed, did fuels need to be developed, and as they were developed and used, what effect did result on our environment? What effect on the economy resulted from the development of transportation?

**Environmental:**

**Integrated with:**

**CONCEPT NO.** 7 - Land Use

**SUBJECT** Language Arts, Social Studies and Science

**ORIENTATION** Land Use

**TOPIC/UNIT** Homes

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
		In-Class:	Outside or Community:
<p><b>Cognitive:</b> Compare a home then and now in terms of:</p> <ol style="list-style-type: none"> <li>conveniences contained</li> <li>style of home</li> <li>materials used</li> </ol> <p>Draw a picture showing the two homes with the characteristics included in the previous objective.</p>		<p>I. Social Studies</p> <ol style="list-style-type: none"> <li>Show pictures and items of homes long ago. Discuss the use of different parts of the home. Pupils can draw a picture of an old house.</li> <li>Pupils can bring pictures of their homes and discuss the things that we have now which were not in the old homes.</li> <li>Compare the two types of homes, especially the many conveniences that help give more leisure time. Let pupils bring out reasons for changes in home. Discuss the yards around homes too.</li> <li>Make a bulletin board comparing the two homes then and now. Pupils can draw them or bring in examples.</li> </ol>	<p>I. Social Studies</p> <ol style="list-style-type: none"> <li>Visit museum or a historical house to see how life was long ago.</li> <li>Visit a model home.</li> <li>Invite a senior citizen of the community to tell about homes when he was a child, and to tell of his childhood (leisure) activities.</li> <li>Field trip to see what things can be included in a model neighborhood. Perhaps continued trips to aid "what if" solution.</li> </ol>
	<p><b>Affective:</b> Debate the pro point of view that modern inventions create more leisure time for families which in turn create environmental problems.</p>		
<p><b>Skills Used:</b></p> <ol style="list-style-type: none"> <li>Discussion</li> <li>Comparing</li> <li>Drawing</li> <li>Building a bulletin board</li> </ol>		(Continued)	

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>Homes Around the World, United - World Film</u> <u>The Treehouse, Brown Co. Library</u></p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p> <p>Museum or historical home Senior citizen of community</p>	<p><u>CLASSROOM (Continued)</u></p> <p>II. Art</p> <p>A. Art</p> <p>The class can create a miniature model neighborhood on a table top or in a sandbox using a variety of media: clay, animals, top cars, boats, box houses, pipe cleaner fences.</p> <p>A "what if" possibility is given and the students are required to make the necessary changes in their model neighborhood.</p> <p>Example:</p> <ol style="list-style-type: none"> <li>What if a proposed highway is planned to go right through the neighborhood?</li> <li>What if there was a sudden influx of people into the area?</li> </ol>

Environmental:

Integrated with:

CONCEPT NO. 7 - Land Use

SUBJECT Language Arts

ORIENTATION Land Use - Snowmobiling

TOPIC/UNIT Snowmobiling

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
Demonstrate how prevalent snowmobiles are in his community through drawings.		<p>I. Language Arts</p> <p>A. Draw pictures of different types of snowmobiles. Children can bring in pictures or models of their favorite.</p> <p>B. Discuss some of the ways snowmobiles can be put to good use:</p> <ol style="list-style-type: none"> <li>1. rescuing people</li> <li>2. taking feed to livestock</li> <li>3. enabling people in remote areas to get to other places</li> <li>4. improved prosperity of given areas</li> </ol> <p>C. Discuss some of the ways snowmobiles are used in an abusive manner:</p> <ol style="list-style-type: none"> <li>1. breaking laws and invading privacy</li> <li>2. invading the scarcity of wild life areas (frightening animals)</li> <li>3. noise and air pollutants</li> <li>4. disregarding safety regulations</li> <li>5. destruction of property and littering.</li> </ol>	<p>I. Language Arts</p> <p>A. Invite a snowmobile enthusiast to talk about the recreational value of snowmobiles.</p> <p>B. Invite a law enforcement officer to talk about the responsibilities of snowmobile owners in town and out. (also enumerate on law and safety regulations and rights of others).</p> <p>C. Invite a property owner to talk about his right to privacy and how snowmobilers have often violated this privacy. (possible solutions).</p>
<p><b>Affective:</b></p> <p>Argue that snowmobiles have detrimental effects on wild life, use of land and people's lives unless properly used.</p>			
<p><b>Skills Used:</b></p> <ol style="list-style-type: none"> <li>1. Drawing</li> <li>2. Discussion</li> <li>3. Dramatization</li> </ol>			

(Continued)

## SUGGESTED RESOURCES

## CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Wis. Conservation Bulletin ICE  
 Nov.-Dec., 1972 p. 3  
 Mission  
 "Better Snowmobile Driving"  
 p. 8 "Off the Beaten Track"  
 Jan.-Feb., 1972 p. 6  
 "Snowmobile Trails for You"

CLASSROOM (continued)

- D. Dramatize how student would feel if he were an animal in the woods and were suddenly invaded by a noisy fearful machine. This dramatization could be extended to farm animals.
- E. Dramatize how student could use a snowmobile in helping someone else.

Audio-Visual:Community:

# If I Were

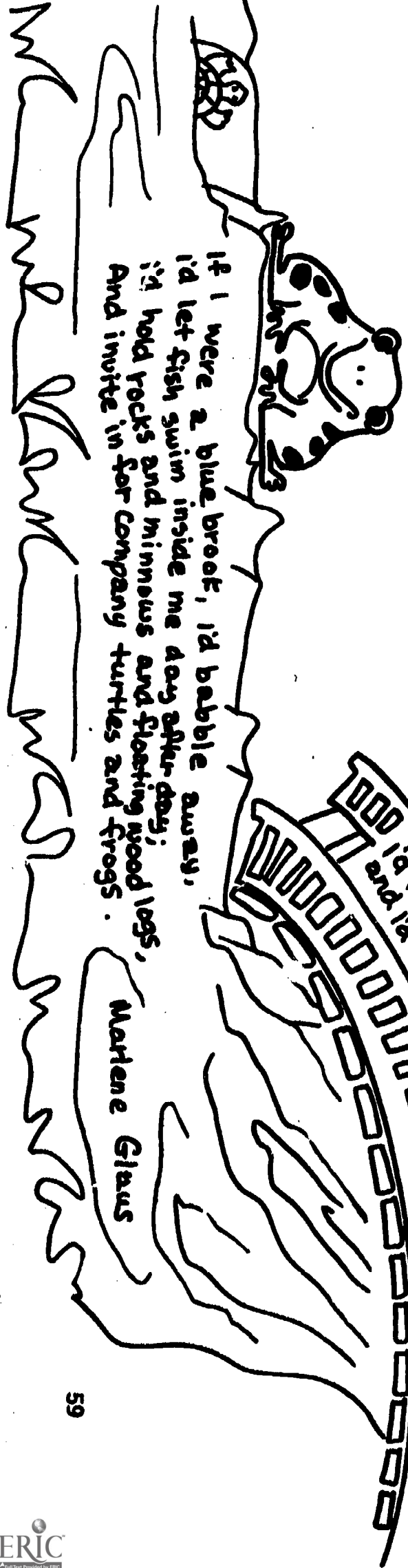
BEST COPY AVAILABLE

If I were the Morning, I'd come out at dawn,  
I'd help people stretch, I'd help people yawn;  
I'd wake up the garden and stir up the breeze,  
I'd help feathered songsters to chirp in the trees.

If I were a blue brook, I'd babble away,  
I'd let fish swim inside me day after day;  
I'd hold rocks and minnows and floating wood logs,  
And invite in for company turtles and frogs.

Martene Glaus

If I were a bridge, I'd be very long  
I'd help things across me and sky overhead,  
I'd have hills around me and blue river-beds,  
and I'd keep my fish safe in my river-bed.



<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>7 - Land Use</u>		<b>SUBJECT</b> <u>Language Arts, Science and Soc. Studies</u>	
<b>ORIENTATION</b> <u>Land-Use - Camping</u>		<b>TOPIC/UNIT</b> <u>Camping</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Illustrate the effect the recent (last 20 years') camping trend has had on forest areas by drawing before and after pictures of camping areas:  a. Amount b. Care		<b>In-Class:</b>  I. Social Studies A. Through the use of a bulletin board: 1. Show the use of park and/or forest area years ago, and how it looks today in regard to camping. (Start with a forest and gradually replace trees with camp sites.)  2. Draw a picture of a camping area you have seen.  3. Discuss how a camp ground is used during the 4 seasons.  4. Discuss how transportation, economic conditions, population growth and leisure time have affected the camp ground.  5. Discuss the use of wood in a campground. Compare woods use today as one for recreational or aesthetic purposes as to an essential use years ago.  6. Discuss the problem created by excessive use of the land by campers (litter, destruction of plant & animal life, fire possibility).	<b>Outside or Community:</b>  I. Social Studies A. Visit a camp ground in your area. Discuss what changes take place in autumn, winter, spring and summer. (When is the camp ground used most - least?)  B. Conservation worker to discuss responsibilities of campers and others using forests and streams.  C. Park attendant or manager to discuss his work and numbers of persons using parks and responsibilities.
<b>Affective:</b>  Defend the use even though much of our land is being taken over for recreational purposes.			
<b>Skills Used:</b>  1. Comparing 2. Drawing 3. Discussion			

**SUGGESTED RESOURCES**

**CONTINUED OR ADDED LEARNING ACTIVITIES**

Publications:

Audio—Visual:

Community:

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>8 - Values and Attitudes</u>		<b>SUBJECT</b> <u>Language Arts</u>	
<b>ORIENTATION</b> <u>Land Use Attitudes</u>		<b>TOPIC/UNIT</b> <u>Water and Weeds</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b>  Differentiate between things that are wants and needs of a person.	<b>In-Class:</b>	<b>Outside or Community:</b>	
	<b>I. Language Arts</b>  A. Write or discuss: "What can I do to enjoy the out-of-doors more often?" What can my parents do to enjoy the out-of-doors more often?  B. Make a list of 10 things you like. Make another list of 10 things you don't like. From the list of 10 you like choose those that are most important to you. After this, hold a discussion about differing values.  C. What are some things TV wants us to buy? Which do we really need?  D. Bulletin Board: Needing and Wanting. Say to class, "Many Things We Use Cause Pollution. We need some of them... but do we really need all of them?"  What things do you think we use that cause pollution, but aren't really necessary? Cut out ads showing them and we'll put on bulletin board.		
<b>Affective:</b>  Debate the importance of satisfying the wants of an individual.  a. pro viewpoint b. negative viewpoint			
<b>Skills Used:</b>			

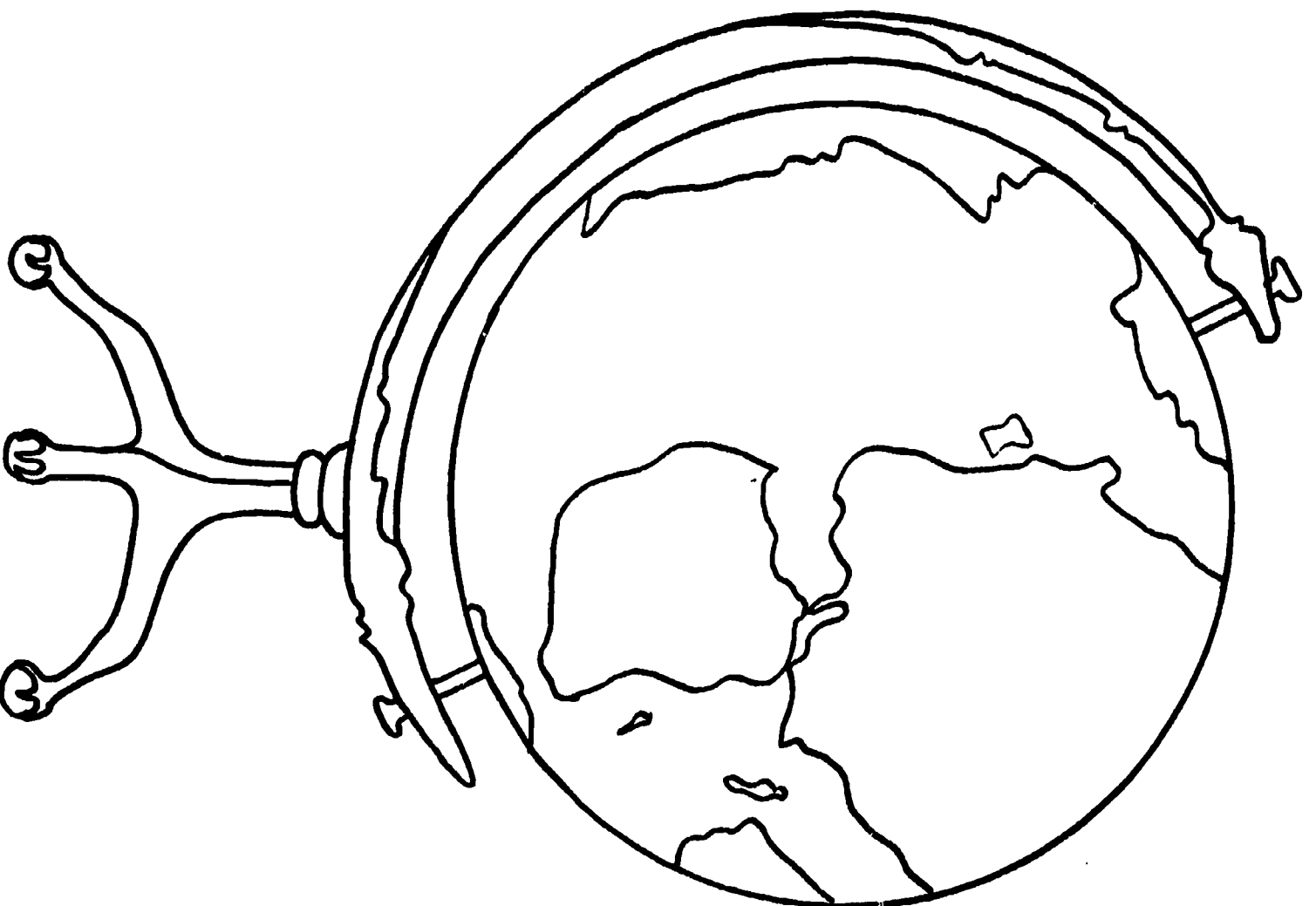
(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Publications:</p> <p><u>Fun With the Environment</u> by U. S. Environmental Protection Agency, Washington, D. C.</p> <p><u>Audio—Visual:</u></p> <p><u>Community:</u></p>	<p><u>CLASSROOM</u> (Continued)</p> <p>Then write, "Why Do You Think We Buy These Things if We Don't Really Need Them"? Also put on bulletin board.</p> <p>E. Ask the class members to determine what goods and services are produced by their parents.</p>

**BEST COPY AVAILABLE**

## The World

All the things you know,  
All the things you do,  
Are part of the world,  
And the world is you.



Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Social Studies

ORIENTATION Yard & Neighborhood Beautification.

TOPIC/UNIT Land Beautification

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Demonstrate to the class a procedure for improving his home neighborhood by:  a. Improving looks b. Reducing litter     <b>Affective:</b>  Participate in beautifying his neighborhood by:  a. cutting weeds b. picking up litter c. planting flowers     <b>Skills Used:</b>  1. Planting seeds 2. Construction 3. Making scrapbook 4. Dramatization 5. Planning a trip	<b>In-Class:</b>	<b>Outside or Community:</b>	
	I. Social Studies A. Plant flower seeds in a milk carton or cans or pots, to be taken home to beautify house or yard. B. Make a scrapbook of pictures of orderly yards and neighborhoods as compared to littered ones. Make posters showing well-kept ones. C. Make up and present a play to demonstrate the importance of keeping our surroundings clean. D. Show pictures of plants that can be used to beautify a yard. E. Make posters to illustrate well-kept yard or neighborhood.	I. Social Studies A. Visit a well-kept yard and talk to owner about how it is maintained. B. Have person who works for city sanitation department talk to class about his job. C. Secure and plant a tree in school yard to beautify it. D. Trip to picnic area to demonstrate to class how they can help keep environment clean, by cleaning up their picnic area. E. Walk around the block to observe the amount of litter to be found in a given area. Make plans to do something about it.	

66/67

1. Planting seeds
2. Construction
3. Making scrapbook
4. Dramatization
5. Planning a trip

**SUGGESTED RESOURCES****CONTINUED OR ADDED LEARNING ACTIVITIES****Publications:****Audio-Visual:**

Film 310 Junk-dump ICE  
Treehouse ICE  
One Day at Teton Marsh ICE (200)

**Community:**

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>9 - Management</u>		<b>SUBJECT</b> <u>Social Studies</u>	
<b>ORIENTATION</b> <u>Classroom and School Beautification</u>		<b>TOPIC/UNIT</b> <u>Classroom Improvements</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b>  Demonstrate that there are many things they can do to make the classroom and school a better place to be through discussion, explanation and construction.	<b>In-Class:</b>	<b>Outside or Community:</b>	
	<div>I. Social Studies A. Take a look at the classroom. 1. What is the best thing about it? 2. What is the worst thing about it? 3. After listening to answers, discuss what the students can do to improve the room. 4. Have students draw and color a picture of the ideal classroom. (Lighting, neatness, plants, floor rugs, aquarium, rearrangement)</div>	<div>I. Social Studies A. Have children look around their homes for things to bring to class to beautify their classroom. B. Invite the school janitor to talk with the class about the importance of a clean school.</div>	
<b>Affective:</b>  Participate in a class project that will change the environment to suit his desires for a better environment.			
<b>Skills Used:</b> 1. Discussion 2. Drawing 3. Dramatization 4. Observation			

(CONTINUED)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p><u>Teacher's Curriculum Guide to Conservation Ed</u></p> <p><u>Audio—Visual:</u></p> <p><u>Discovering Your Environment Kit 16 "School Lawns"</u></p> <p><u>Community:</u></p>	<p><u>CLASSROOM (Continued)</u></p> <p>E. Divide the bulletin board into three parts and label at the top:</p> <ul style="list-style-type: none"> <li>a. Land as it grew (natural)</li> <li>b. Land man changed for the good of men</li> <li>c. Land man used badly.</li> </ul> <p>The children are to make a collage on a bulletin board using pictures from magazines and newspapers, which they have obtained and brought to class.</p>

Environmental:

CONCEPT NO. 9 - Management

Integrated with:

SUBJECT Science

ORIENTATION Temperature Control

TOPIC/UNIT Temperature Control

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
		<p>I. Science</p> <p>A. Introduce seasons and the temperature change in each.</p> <p>1. What was the temperature yesterday?</p> <p>2. What was the temperature last week?</p> <p>3. Temperature last month?</p> <p>4. During the winter? etc.</p> <p>B. Bring thermometer in and practice reading thermometer.</p> <p>Keep records of temperature outside for one week. Compare coldest temperature and warmest. Children will do the reading of the thermometer.</p> <p>C. Ask question: How does man control the change of temperature? Clothing, fires, air-conditioners.</p> <p>1. Have children bring in clothing samples of how they would dress in a certain season.</p> <p>2. Children report to school on how the temperature is controlled in their home.</p>	
	<p>Read a thermometer and keep a record of the temperature for one week, on paper or chalk-board.</p> <p>Explain different ways man adapts to differences in temperature in his life.</p>		
Affective:	<p>Suggests temperature as being the cause of a person feeling sluggish, active, etc.</p>		
Skills Used:			
<ol style="list-style-type: none"> <li>1. Discussion</li> <li>2. Reading a thermometer</li> <li>3. Writing temperature</li> <li>4. Reporting</li> <li>5. Record keeping</li> </ol>			

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Air Is All Around You  
New York, Crowell 1962

Audio-Visual:

Film:  
Air and What It Does  
Encyclopaedia Britannica Films, Inc.  
1150 Wilmette Avenue  
Wilmette, Illinois

Community:

weatherman  
Heating and cooling man  
Businessman that deals with  
clothing. Could be a father,  
uncle, etc.

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art

ORIENTATION How Can Clay Show That We Can Manipulate Our Environment

TOPIC/UNIT Clay Project

**BEHAVIORAL OBJECTIVES**

**STUDENT-CENTERED LEARNING ACTIVITIES**

**Cognitive:**

**In-Class:**

**Outside or Community:**

Describe how man is able to control his environment through the analogy to a piece of clay.

I. Art

A. How do you explain to a 5-8-year-old child that man can change and manipulate his environment through an art project? The answer: By using one of the most manipulative mediums known to art - clay.

I. Art

A. If the area is conducive. have the students go outdoors and get your own clay.

**Affective:**

Sensitive to the need to control our environment by identifying examples of little or no control while on a field trip.

B. Each student will be given a block of clay (size depends on quantity available).

C. This block of clay is theirs to form whatever they wish, just as our environment is ours to form whatever we wish. If the student manipulates and changes his clay with care and thought, he will come forth with a rewarding product, if not disaster. The same thing holds true with us and our environment. (Note: when doing this project the environmental lesson must be taught or the project is worthless).

**Skills Used:**

1. Increasing manual dexterity
2. Basic clay working techniques

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

"Clay Is Fun" R. A. Yoder,  
School Arts, p. 20-1 Oct. '71  
"It Just Happened, Clay Modeling"  
Arts and Activities 69:22-4  
Mr. '71

Audio—Visual:

"Creating With Clay", B.F.A.  
Available for rental from BAVI

Community:

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>9 - Management</u>		<b>SUBJECT</b> <u>Art</u>	
<b>ORIENTATION</b> <u>Nature As an Inspiration for</u>		<b>TOPIC/UNIT</b> <u>Overall Environment Design</u>	
<b>BEHAVIORAL OBJECTIVES</b> <u>Overall Design</u>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Translates a design of nature into a textile design on paper with drawing pencils.	<b>In-Class:</b> I. Art A. Many patterns that occur in nature, man adapts to his life in sculptural forms, color usage, and textile designs. To see how this is done, we will use a potato print. B. Armed with drawing paper and pencils, go outside and sketch interesting patterns that occur in nature, eg; floral designs, leaves, textures, mushrooms, branches, etc. C. Back in the classroom, choose the design you like best. D. Cut a potato in half and onto the exposed part of your potato draw your design. E. Cut around your design so it is in relief. F. Paint relief surface and print on a sheet of paper. G. Continue repeating design so you have an overall pattern such as a textile design. (Note: color of design may be kept the same or printed in different colors).	<b>Outside or Community:</b> I. Art A. Get a wallpaper sample book to show overall patterns and designs utilized from nature. B. Take alphabet observation hike. (See next page).	
<b>Affective:</b> Actively participates in creating a textile design on paper.			
<b>Skills Used:</b> 1. Basic relief printing techniques 2. Rhythm in design			

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Audio—Visual:

How To Make Potato Prints, B.F.A.  
Available for rental from BAVI  
Alphabet Observation Hike,  
Field Act. No. 25, ICE

Community:

## ALPHABET OBSERVATION HIKE

77

PURPOSE: To help the individual become aware of native materials found in the outdoors through direct observations.

PROCEDURE: Divide into small groups and have each group list as many natural items they can find beginning with each letter of the alphabet.

### DESCRIPTIVE WRITING

DIRECTIONS: Find the objects listed below and then do the following things with each object:

1. look at the object
2. Feel the object
3. Smell the object
4. Listen for sounds which may come from it or are associated with it.
5. Taste it (if safe to do so)

Write as many descriptive words as the basis for description as you can using your sensory experiences. Some possible examples are:

1. This year's deciduous leaf
2. This year's evergreen leaf
3. Last year's deciduous leaf
4. River water
5. Water from the stream
6. Wet soil along the river
7. A rock
8. Twig on a tree
9. A flower
10. Bark on a tree

\* Northern Illinois University

### WORDS INTO PICTURES

In my fifth grade class we are trying to become more exact in expressing our ideas. To help in this effort, I asked each student to write a descriptive paper on an imaginary animal. Then, without warning, I had them exchange papers. Next, I asked each child to draw a picture of the description he received.

Their enthusiasm was high, their reactions natural and critical: 'Nothing here tells me how big it's supposed to be.' 'I can't make him do anything because that was left out.'

After several attempts at this activity, the student's descriptions, and thereafter their pictures, became much more detailed.

\* Shirley R. Secord, fifth grade teacher  
Central School, Natick, Mass.

LANGUAGE ARTS ACTIVITIES

Play "blind" and describe various outdoor situations.  
Write a letter home or to a friend.  
Take field notes.  
Use the camp library for research and reading.  
Tell some original "tall tales".  
Write a story or a song about the out-of-doors.  
Plan and prepare a tape of your outdoor experiences.  
Write a poem about the Mississippi. (Fox River)  
Take a camera hike.  
Keep an outdoor diary or "log".  
Practice careful listening.  
Recognize and record new "outdoor words".  
Write new words in snow, sand, or moist earth.  
Enrich word meanings.  
Make temporary or permanent labels for a nature trail.  
Use children for "living labels".  
Make a trail guide.  
Produce one-sentence descriptions.  
Describe a natural phenomena such as a storm.  
Write stories or poems about natural objects.  
Give news or weather reports.  
Compose a myth or legend about some area or object.  
Identify and label specimens.  
Keep a diary or write a story about "My Spot" (an outdoor area  
chosen by the student of particular interest to him)  
"Space Traveler" --- describe our environment from an outsider's  
point of view.  
Take some good "nature notes".  
Describe various outdoor odors using proper terminology.  
Learn to spell the names of trees, animals, etc.  
Talk with "oldtimers" to learn the history of trees.  
Start a tree calendar and diary.  
Make a list of "outdoor" sounds and weave them into a story.  
List several adjectives such as soft, smooth, twisted, and hunt  
for nature objects to fit these words.  
Describe nature sounds in writing.  
Compose outdoor rope-skipping rhymes.  
Write a story about "stars".  
Compose a "ballad".  
Prepare a radio or television program. (make-believe)  
Use charades to portray new outdoor vocabulary words.  
Interview various adults about the out-of-doors game warden.  
Dramatize some "problems" of the pioneers or Indians.

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art

ORIENTATION Urban Environment

TOPIC/UNIT Diorama

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b> Describe the characteristics of a city structure.		<b>In-Class:</b>	<b>Outside or Community:</b>
		I. Art A. Make a city diorama.	I. Art
		1. Cut out pictures of people, buildings, trees, cars, anything that's found in your city.	A. Have the students take note of the streets and area around them on their way to and from school.
		2. Paste a piece of cardboard on the back.	
<b>Affective:</b> Conscious of the make-up of the city by identifying cars, people and buildings as all being a part of the make-up of the city.		3. Draw blocks and streets, & manhole cover on a big piece of cardboard or the bottom of a large box.	
		4. Assemble your pictures and place them in the city in their appropriate places.	
<b>Skills Used:</b> 1. Construction 2. Cutting 3. Pasting			

79

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>"Community Planning Handbook" #110 ICE RMC Gi "A Place To Live" #110 A ICE RMC</p> <p><u>Audio—Visual:</u></p> <p><u>Community:</u></p>	

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>9 - Management</u>		<b>SUBJECT</b> <u>Social Studies, Phy. Education &amp; Music</u>	
<b>ORIENTATION</b> <u>Man vs. Environment</u>		<b>TOPIC/UNIT</b> <u>Low Organization Games</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b> After playing the games and discussing how man changes his environment, 75% of the children will be able to list five ways they can change their home environment.		<b>In-Class:</b> I. Music and Physical Education A. <u>Pick the Pumpkin Patch</u> (on back) B. <u>Mulberry Bush</u> Record To the words of <u>Mulberry Bush</u> , the classroom teacher may put words into the song to fit the classroom environment instead of home environment. C. Discussion: Student-centered, teacher-directed.	<b>Outside or Community:</b> I. Social Studies A. Possible correlation with classroom teacher's social studies unit. Ex. Students' relationship to room, home, neighborhood, and city environment.
<b>Affective:</b> Demonstrate his role in improving his environment by making and using litterbags.		<ol style="list-style-type: none"> <li>Q. Did you change the pumpkin patch? A. Yes.</li> <li>Q. How did you change the things you did in the record? clothes-washed, Ironed, Baked Bread, Mend Clothes, Sweep floor, etc.</li> <li>Q. How does your mother and father change the land around your home?</li> <li>Q. What ways does man change our city?</li> </ol>	
<b>Skills Used:</b> 1. Running 2. Throwing 3. Rhythmic		(CONTINUED)	

## SUGGESTED RESOURCES

### Publications:

Appleton Elementary Phy. Ed.  
Department  
Primary Grades Handbook

### Audio—Visual:

Mulberry Bush  
Victor 20806 (record)

### Community:

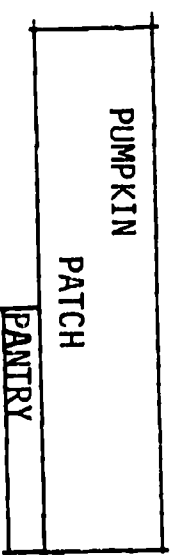
## CONTINUED OR ADDED LEARNING ACTIVITIES

### CLASSROOM (Continued)

D.

#### PICK THE PUMPKIN PATCH

Equipment: 4 7" playballs or rhythm balls. Designate the playing space. Four children are selected to be the Pumpkin pickers. They put on a red pinnie, take a ball, and go stand in the center of the playing area. The other children are pumpkins and scatter about the space. On the signal "Pick the Pumpkin Patch," the pickers chase after the pumpkins, throwing their balls at them in an attempt to eliminate them from the game by hitting them below the head. The pumpkins may dodge anywhere within the designated boundaries. If they are hit, they go sit down in the pantry (where they will be made into pie). They are eliminated from the game. After a designated time, 3-4 min., the Pickers count the number of pumpkins they have picked (hit). They choose a pumpkin still in the patch to take their place. Those pumpkins who were eliminated may now re-enter the game. See which group of pickers can pick the most pumpkins.



E. SUGGESTIONS:

1. Make the pumpkin patch very large, so the children get a good run. This is a good game for a cooler day out of doors as most of the children are active for the greater share of the playing period.
2. When choosing children to be the first pickers, try to select those who are not chosen often by the other children. You might want the girls to choose girls to take their places and boys to choose boys. In this way, the throwers will be divided between boys and girls.

Environmental:

Integrated with:

CONCEPT NO. 9 - Management

SUBJECT Art, Physical Education and Music

ORIENTATION Man Affects Nature

TOPIC/UNIT Singing Games

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:	Explain why some things or situations are considered beautiful while others are considered ugly by the general public (not artists).	In-Class:	Outside or Community:
Affective:	Sing and rhythmically dramatize expressions of joy toward beauty in nature alternately with expressions of disgust at man's carelessness and abuse of it.		
Clean up litter which they see around them on the school ground.			
Skills Used:			
1. Basic steps and rhythmic movements to be used in creative dance and group dancing.			

I. Physical Education	I. Art
A. Direct the children to form a circle and join hands for a special game.	A. Have a "paper-pick up party" on the school grounds. The children could decorate large paper bags with signs like:
B. Teach them the chorus of the song: Rig-a-jig, to the tune of Buffalo Gals.	a. Let's keep our yard clean.
C. Have the children skip around in a circle while you sing the words:	b. Down with litterbugs.
A rig-a-jig, jig, and away we go, away we go, away we go, A Rig-a-jig and away we go, Hi ho, Hi ho, Hi ho.	It may be good to do it at recess when other children are around to see the demonstration so a few may get the message.
D. Ask the children to show by their actions, how they feel about each thing you sing about.	
E. Teacher sing the verses while the children dramatize. Verses on back.	
F. Verses for song, "Rig-A-Jig"	
1. As I went walking down the street, down the street, down the street, A beautiful flower I did see - hi-ho, hi-ho, hi-ho	
2. As I went walking down the street..An ugly old tin can I did see - hi-ho, hi-ho, hi-ho.	

(CONTINUED)

## SUGGESTED RESOURCES

## CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Curriculum for Elementary Physical  
Education, Nicks, Mel,  
Diocesan Dept. of Education,  
Green Bay, Wis. 1965

## CLASSROOM (Continued)

- F. 3. As I went walking...A pretty green fir tree I did see,  
Hi-ho, hi-ho, hi-ho.
4. As I went walking...An ugly old tree stump I did  
see...hi-ho, hi-ho, hi-ho.
5. As I went walking...Some clean sparkling water I  
did see...hi-ho, hi-ho, hi-ho.
6. As I went walking...A polluted river I did see....  
hi-ho, hi-ho, hi-ho.

Audio—Visual:Community:

Where Go the Boats

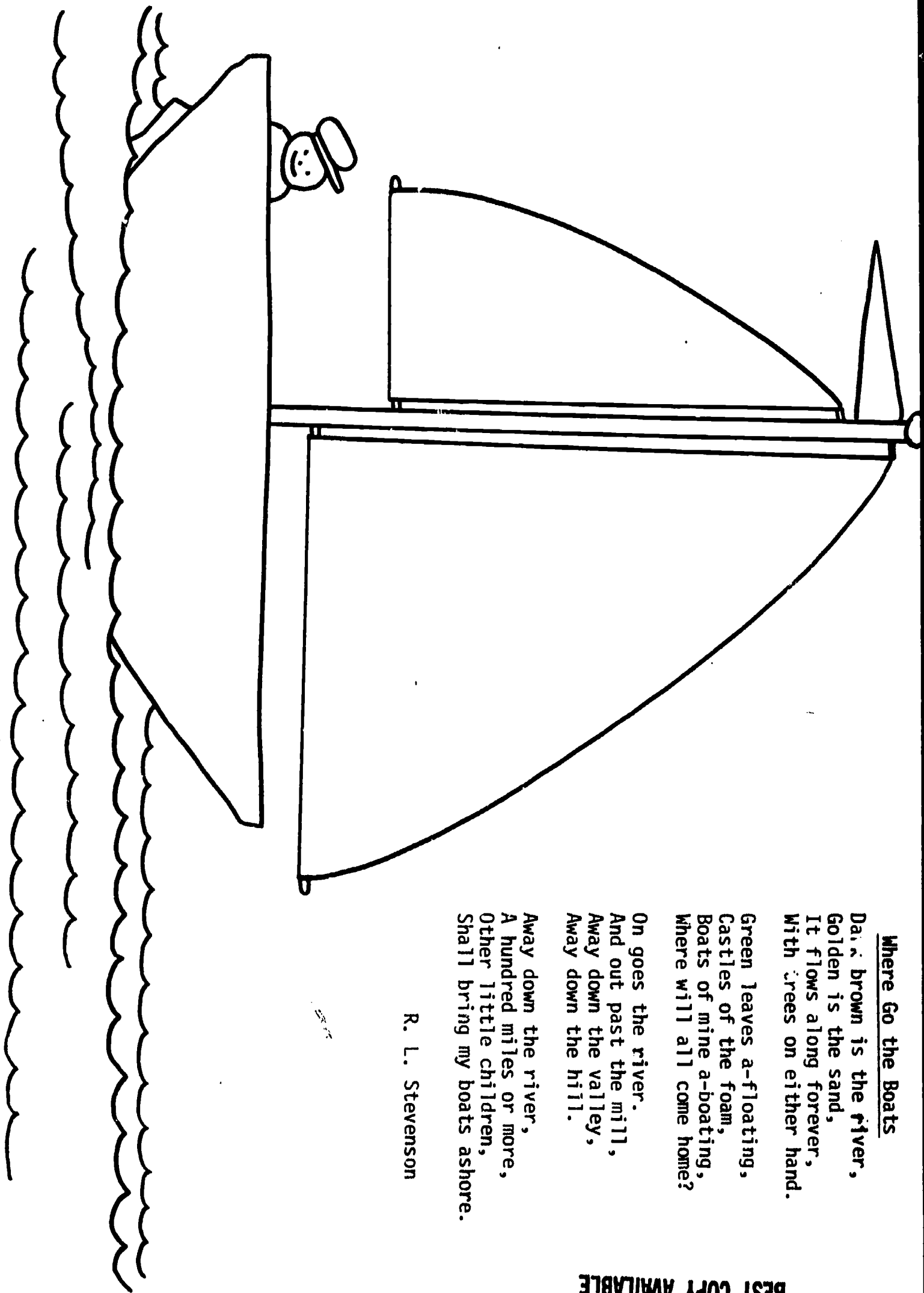
Dark brown is the river,  
Golden is the sand,  
It flows along forever,  
With trees on either hand.

Green leaves a-floating,  
Castles of the foam,  
Boats of mine a-boating,  
Where will all come home?

On goes the river.  
And out past the mill,  
Away down the valley,  
Away down the hill.

Away down the river,  
A hundred miles or more,  
Other little children,  
Shall bring my boats ashore.

R. L. Stevenson



BEST COPY AVAILABLE

Environmental:

CONCEPT NO. 10 - Economic Planning

ORIENTATION LAND USE

Integrated with:

SUBJECT Social Studies and Language Arts

TOPIC/UNIT Folktale Dramatization

BEHAVIORAL OBJECTIVES

Cognitive:

Indicate the long term result of careless planning in the use of forest land through creative dramatics.

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

I. Social Studies

A. "Pick a Pretty Flower" bulletin board to show how many things can soon be destroyed. First admire the flowers. Then tell each child to go and pick one. Soon there's a few left. This same thing happens when things of nature are destroyed.

Affective:

Argue that there are many conditions to consider when man tampers with the environment instead of just one or two such as litter or use of water.

Outside or Community:

I. Social Studies

A. Have agriculture teacher or farmer visit to tell how he rotates his crops. Also, why he fertilizes and sprays some crops. What machinery is used to do these jobs?

B. Visit highway under construction and watch man's machine. How will the highway help the community? How will it change the environment?

a. less homes for people and animals.

C. School nurse or dentist can discuss how short-term gains (not brushing teeth, eating candy) can result in long-term losses. (cavities).

Skills Used:

1. Constructing
2. Dramatization
3. Making cartoons
4. Listing
5. Making a bulletin board
6. Audio skills

C. Tie in environmental loss resulting from short-term gains.

(Continued)

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:  <u>The Little House</u>, Virginia Lee  <u>Bates, Houghton, Mifflin</u>, 1970  <u>Miguel's Mountain</u>, Bill Binzen,  <u>Coward-McCann</u>  <u>Why the Bear Lost His Beautiful Tail</u></p> <p><u>Audio-Visual:</u></p> <p><u>Community:</u></p> <p>Farmer  Agriculture teacher  Highway construction</p>	<p><u>CLASSROOM (Continued)</u></p> <ol style="list-style-type: none"> <li>I. C. <ol style="list-style-type: none"> <li>1. Campfires and cigarettes, (forest fires).</li> <li>2. Economic gains of industry, (pollution of air and water).</li> <li>3. Lack of crop rotation, (depleted soil).</li> <li>4. Economic gains in wood industry, (disappearing forests).</li> </ol> </li> <li>II. Language Arts <ol style="list-style-type: none"> <li>A. Read, <u>Why the Bear Lost His Beautiful Tail</u> to the Children. <ol style="list-style-type: none"> <li>1. In a discussion, point out the fact that the bear wanted to get something quickly and did it in a foolish way suffering a loss which could not be replaced. Have the children tell what the bear could have done which would have been more sensible. (It should have been planned.)</li> <li>2. The children can make puppets and act out the folktale.</li> </ol> </li> <li>B. View filmstrip or read book on one of the following:  Grasshopper and the Ants  Frederick  Three Little Pigs  Hare and the Tortoise</li> </ol> <p>Discuss how the short-term gains result in long-term losses.</p> </li></ol>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b>	10 - Economic Planning	<b>SUBJECT</b>	Social Studies
<b>ORIENTATION</b>	Quality of Life	<b>TOPIC/UNIT</b>	Air Pollution
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b> Count and graph the number of pleasure motor vehicles owned by families in the classroom.	<b>In-Class:</b>		<b>Outside or Community:</b>
	I. Social Studies A. Discuss pollution caused by motor vehicles. B. You will survey motor vehicles. 1. From classroom members count the number of snow-mobiles, mini bikes, ATV's motor boats and go-carts. 2. Make a picture graph of the number of vehicles owned by families of room members. C. Pollution of a motor vehicle. 1. Have an older brother or mechanic bring a motor driven vehicle to school. 2. Have him start the motor outside. 3. Use a white cloth placed behind the exhaust pipe to see the emission. D. Discuss the pollution caused by the emission. 1. What happens to the air? 2. How does this loss compare to the joy gained by driving the vehicle?		
<b>Affective:</b> Question the need for so many pleasure motor vehicles in the community.			
<b>Skills Used:</b> 1. Counting 2. Discussion 3. Graphs 4. Compare			

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Dirty Air, Minnesota Environmental Sciences Foundation, Inc.  
Project ICE RMC  
Dangerous Air - Kalaver -  
Project ICE RMC

Audio-Visual:

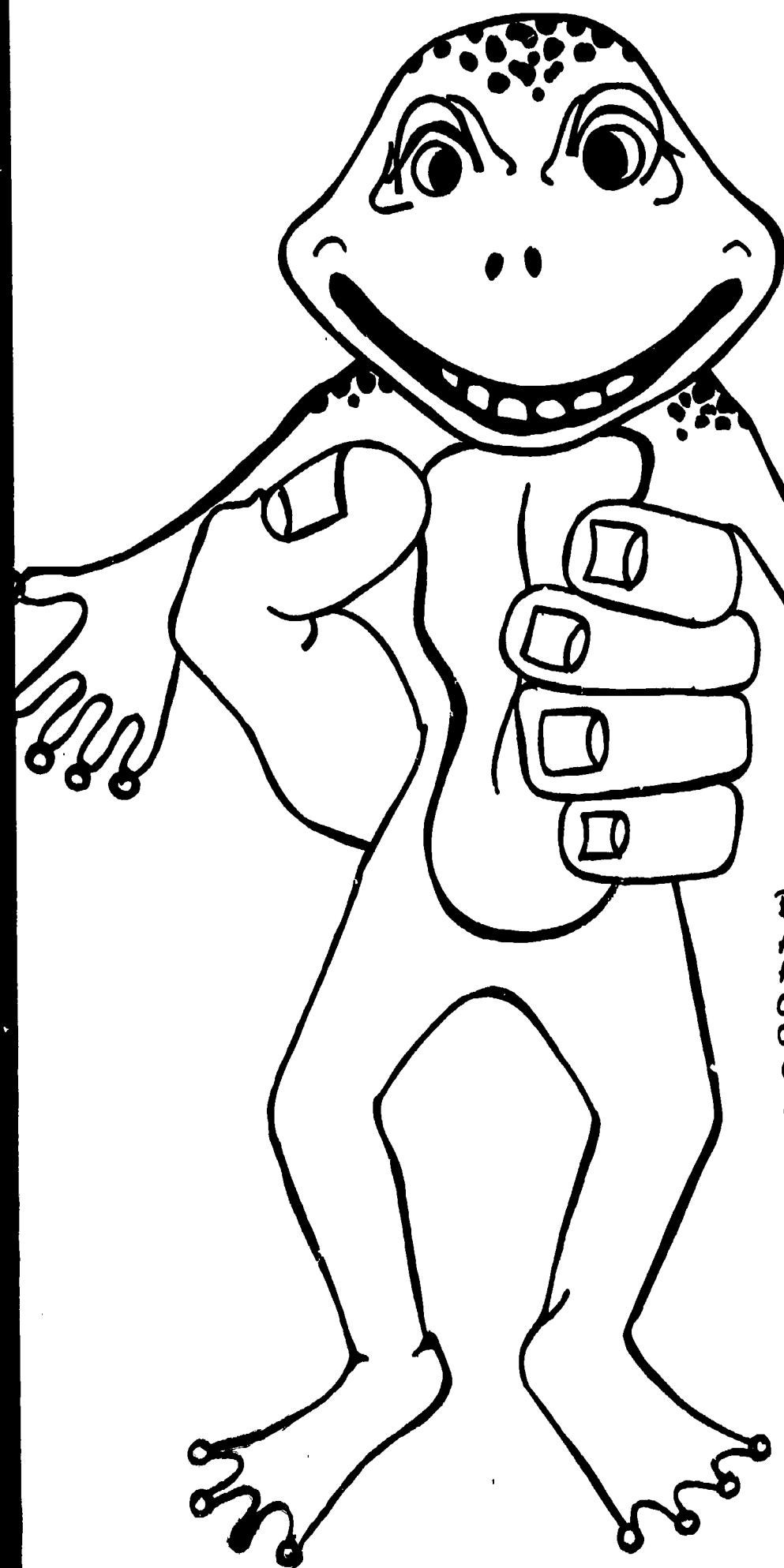
Film:  
Air All Around Us McGraw-Hill  
Air; What It Does  
Encyclopaedia Britannica  
City Bus Driver BAVI

Community:

Industrialist or  
Garage Mechanic

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>10 - Economic Planning</u>		<b>SUBJECT</b> <u>Social Studies</u>	
<b>ORIENTATION</b> <u>Short-Long term factors</u>		<b>TOPIC/UNIT</b> <u>Multi-Media</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Define the term limited materials. Describe the effect of limited materials on the way they are used. a. how long available b. Search for other materials		<b>In-Class:</b> I. Social Studies A. Wastefulness - student should be given materials that are to last for a certain amount of time. (Ex. a two-day project. They are given an amount of paper, paint, glue etc.). If students use all the first day, they have nothing for second day. (A project such as printing or mosaics or even painting would serve as a front for this hidden message).	
<b>Affective:</b> Demonstrate awareness of effect of limited materials on the future availability and use by making statements such as, "If you use it up now, there won't be any for the next day".		<b>Outside or Community:</b> I. Social Studies A. Have students talk to parents about how materials may be over-used or wasted in their jobs. Report back to class. B. Take a trip to spot community problems caused by using materials without "thought for the tomorrow".	
<b>Skills Used:</b> 1. Students will learn how to store equipment properly. 2. Students will learn printing, painting or mosaics.			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>"Printing: Plant Prints" I. Geary, Instructor, p. 94 June 1971</p> <p><u>The Diligent Destroyer</u> (150) Laycock, George, 1970 (LA)</p> <p>"Printmaking for Primary Grades" il. Arts and Activities, R. A. Daniel 70:28-9, Oct. 1971</p> <p>Hand-made Slices: Whetstone for Perceptual Activity: E. Scott, Arts and Activities, p. 30-1, April 1972</p> <p>(Continued)</p> <p><u>Audio-Visual:</u></p>	<p><u>PUBLICATIONS</u> (Continued)</p> <p>Creative Photography Without Film, Richard Latta, <u>Design</u>, p. 28-29, Summer 1972</p> <p>"Happy Way to Printmaking: Styrofoam Experiments", E. Deutsch Arts and Activities, p. 32-33, April 1970</p> <p>"Plastic Prints Are Neat!" M. Saxer, <u>Arts and Activities</u> p. 14-16, July, 1969</p>
<p><u>Community:</u></p>	



# The Frog

Be kind and tender to the Frog  
And do not call him names,  
As "slimy-skin" or "Pollywog,"  
Or likewise "Uncle James."  
Or "Gape-a-grin" or "Toad-gone-wrong,"  
Or "Billy Bandy-knees."  
A Frog is very sensitive  
To epithets like these.

No animal will more repay  
A treatment kind and fair,  
At least, so lonely people say  
Who keeps a frog (and by the way)  
They are extremely rare.

Hilaire Belloc

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Art, Social Studies and Language Arts

ORIENTATION Waste Disposal

TOPIC/UNIT Littering

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
Cognitive:		In-Class:	Outside or Community:
Explain the extent of the total change that occurs when large numbers of people do things that result in only a little change by themselves.		<p>I. Language Arts</p> <p>A. Litterbug Game - Each child finds something in his desk that he no longer wants. Go outside or remain in classroom. One child drops his unwanted item (litter) - the change is not too bad. But then have a few more go - then everyone drop their litter. Next step: Clean up - put in trash can. (Encourage high school ag. or art class to design attractive litter containers.)</p> <p>II. Art</p> <p>A. Litterbug Bulletin Board. Draw outline of a huge bug. Children go on a "pick-up litter" walk. When they come back, glue litter found to "Litterbug" Bulletin Board.</p> <p>B. Make individual litter bags with slogans in art class. Use them for pickup at school; then have them use them in their family car or elsewhere.</p>	<p>I. Social Studies</p> <p>A. Yard trip for children to see the articles that have been dropped by careless people.</p> <p>B. Field trip to a park or picnic ground to arouse feelings in children about environment used by the public.</p> <p>C. Drawings of the devastation that was caused at park or picnic ground. Follow activity with discussion period.</p>
Affective:			
Pick up after himself in and outside of the classroom.			
Skills Used:			
<ol style="list-style-type: none"> <li>1. Planting</li> <li>2. Murals</li> <li>3. Drawing</li> </ol>			

(CONTINUED)

94/95

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p><u>Publications:</u></p> <p>Books:  <u>Once There Was a Tree</u>, Discovering Nature Series, Phyllis S. Busch, World Publishing  <u>Patterns of Nature</u>, Jeffrey Baker, Doubleday  <u>Keep Our World Clean</u>, song sheet available at CESA #9 Office  <u>This Land Is Your Land</u>, song sheet</p> <p><u>Audio—Visual:</u></p> <p>Films:  Garbage, CESA 9  Litterbug, color, 10 min., Avis BAVI  The Litterbug, Walt Disney, 8 min.</p> <p><u>Community:</u></p> <p>Forest Ranger  Janitor</p>	<p><u>CLASSROOM (Continued)</u></p> <p>III. Social Studies</p> <ol style="list-style-type: none"> <li>Let the child who found the most litter be "King for a Day" or "Queen for a Day".</li> <li>Tell janitor to not empty waste baskets for one week. This will be similar to garbage pickup once a week. At the end of the week, analyze the contents of the waste baskets. Was the paper really unusable and could it have been erased rather than wasting it and taking new? Separate paper for recycling.</li> <li>Have janitor show children what he does with the waste from the waste baskets.</li> <li>During a week's period, the children will make a graph and put checks behind their names as to how many bags of litter they have picked up.</li> <li>Talk about individual efforts toward the litter campaign. (weekly award).</li> </ol>

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>11 - Individual Acts</u>		<b>SUBJECT</b> <u>Social Studies, and Language Arts</u>	
<b>ORIENTATION</b> <u>Taking Care of Property</u>		<b>TOPIC/UNIT</b> <u>Care of Property</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b>  Demonstrate several ways he can take care of his property and the property of others.	<b>In-Class:</b>		<b>Outside or Community:</b>
	I. Language Arts A. Discuss the care of desks, books and clothes. B. Teacher take out comic book, using crayon, pencil, etc. C. Discuss why we should start writing on and in text. D. Discuss why we should take care of our desks, books and clothes. E. Discuss why we should take care of public grounds and property. F. Through dramatization, demonstrate the need for children to respect personal property and the property of others. Examples: 1. A child destroying another student's art work. 2. A student not taking care of school property (losing a game part) rendering a loss to all students. 3. Lost puzzle parts.		I. Social Studies A. Have janitor talk to children about the effects of school property destruction. B. Talk to a law enforcement officer about the problems created by public property destruction.
<b>Affective:</b>  Respect his own and public property by keeping books and desks clean, and without carvings and marks.			
<b>Skills Used:</b>  1. Discussion 2. Demonstration			

**SUGGESTED RESOURCES****CONTINUED OR ADDED LEARNING ACTIVITIES****Publications:****Audio—Visual:****Community:**

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b>	<u>11 - Individual Acts</u>	<b>SUBJECT</b>	<u>Art</u>
<b>ORIENTATION</b>	<u>Individual Alterations</u>	<b>TOPIC/UNIT</b>	<u>Fire Prevention</u>
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Explain that a single cause can be responsible for the destruction or upbuilding of an environment.		<b>In-Class:</b>	<b>Outside or Community:</b>
		I. Art A. Murals: Forest Fires. 1. Draw what someone did that start the fire: matches, campfires left unattended, cigarettes. 2. Draw trees burning and wildlife fleeing from their forest homes. 3. Results of the fire: blackened stumps and wildlife desperate to find a new home.	I. Social Studies A. Arbor Day - Have a tree planting ceremony at your school. Choose a protective, attractive area where it will add to the school's beauty. Give each child a seedling to plant at home. Tree will grow up with the child.  B. Have a forest ranger speak about fire safety.
<b>Affective:</b>  Accepts the responsibility of individual working together to develop the whole by participating in the making of a mural or some other group activity.		B. Read about "Smokey the Bear". let children draw his picture or write a short story.  C. Stress that wild flowers in the area should be enjoyed and not picked. Bulletin Board, "Wild Flowers". (Hays Pub.) Learn to recognize.	
<b>Skills Used:</b> 1. Construction 2. Observation 3. Discussion 4. Group planning and cooperation.			

99

SUGGESTED RESOURCES

CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Smokey the Bear, Story and song

Audio—Visual:

Forests, color, 10 min., Gateway,  
BAVI  
Your Friend the Forest, Save It or  
Destroy It, color, 6 min. EBF BAVI  
Kit: Forest Fire Prevention and  
Conservation  
Kit  
Smokey the Bear, 5 min., USDA

Community:

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>11 - Individual Acts</u>		<b>SUBJECT</b> <u>Music, Physical Education and Soc. Studies</u>	
<b>ORIENTATION</b> <u>Cleanup</u>		<b>TOPIC/UNIT</b> <u>Rhythmical Activities</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b>  List at least five ways to beautify the land around them.		<b>In-Class:</b>  I. Music & Physical Education A. To tune of the Mulberry Bush, Chorus: Here we go round a beautiful tree, a beautiful tree, a beautiful tree, Here we go round a beautiful tree, So early in the morning. This is the way we:  1. pick up twigs (3x) 2. rake the lawn (3x) 3. cut the grass (3x) 4. water the plants (3x) 5. trim the hedge (3x) ...so early in the morning.  Discussion: Cleaning up can be fun as well as profitable.	<b>Outside or Community:</b>  I. Social Studies A. Have a school yard cleanup. B. Clean up an entire block. C. Clean up a nearby park area.
<b>Affective:</b>  Brag about doing his share in keeping the land clean and litter-free, and give example of what he did.			
<b>Skills Used:</b>  1. Rhythmic movements corresponding to the listed activities.			

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
<p data-bbox="1409 302 1444 492"><u>Publications:</u></p> <p data-bbox="1236 141 1385 701">Nicks, Mel, Curriculum for <u>Elementary Physical Education</u>, Diocesan Dept. of Education Green Bay, Wis. 1965</p> <p data-bbox="888 302 923 516"><u>Audio-Visual:</u></p> <p data-bbox="350 302 385 492"><u>Community:</u></p>	

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>11 - Individual Acts</u>		<b>SUBJECT</b> <u>Math, Soc. Studies and Language Arts</u>	
<b>ORIENTATION</b> <u>Solid Waste Disposal</u>		<b>TOPIC/UNIT</b> <u>Recycling</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Measure the bottles and cans from his family and compare this garbage to the amount for the total class.	<b>In-Class:</b> I. Social Studies A. Have the students select a day on which they will ask their mothers to save the cans and bottles she empties that day. 1. These are brought to school. 2. Count the number of bottles, count the number of cans.	<b>Outside or Community:</b> I. Language Arts A. City worker to discuss his job with Sanitation Department. B. Law enforcement officer to discuss the laws against littering refuse disposal.	
<b>Affective:</b> Demonstrate that his help is needed to cut down the pile-up of refuse by picking up litter along his path to school.	<b>II. Math</b> A. How much do these cans weigh? 1. Measure one person's cans and bottles. 2. Measure the entire group's cans and bottles. 3. Compare these. B. How long is a line of the cans? 1. Line up and measure individual cans. 2. Line up the entire group's cans and bottles and measure. 3. Compare. C. Project this into city garbage collection. Problems?		
<b>Skills Used:</b> 1. Discussion 2. Counting 3. Comparing 4. Survey taking 5. Cause and effect thinking			

**SUGGESTED RESOURCES****Publications:**

Trash Is Taking Over,  
Minnesota Environmental Sciences  
Foundation at ICE RMC

**Audio—Visual:****Community:**

Sanitary Engineer to discuss  
refuse picked up a few years ago  
as opposed to now. Stress  
quantity and how disposal of  
refuse has changed.

**CONTINUED OR ADDED LEARNING ACTIVITIES**

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Music

ORIENTATION Recycling

TOPIC/UNIT Recycling

BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Construct a playable instrument from materials which have been reclaimed.		<b>In-Class:</b>	<b>Outside or Community:</b>
		I. Music A. Teacher, student interaction of what kind of musical instruments can be made from discarded materials. 1. Drums from coffee cans 2. Rattles from salt boxes 3. Chimes from glass bottles 4. Shakers from bottle caps B. How would you go about constructing these instruments? C. Students bring in materials D. Students construct instrument. E. Discuss how other materials can be recycled in other areas. F. Students could make up their own music for their instruments.	
<b>Affective:</b>  Assist in finding ways for re-using materials such as are found in a normal home.			
<b>Skills Used:</b>  1. Following step by step directions. 2. Instrument construction			

**SUGGESTED RESOURCES**

**CONTINUED OR ADDED LEARNING ACTIVITIES**

**Publications:**

Making and Playing Classroom Instruments, Marcelle Verrazza  
\$1.50

Fearon Publishers, Inc.  
2165 Park Boulevard  
Palo Alto, Calif. 94306  
Music Inst. for Children to Make, John Hawkinson

**Audio-Visual:**

Ecoicgy Folk Songs, Grades 4-H.S.  
Album K 9000 - 1 - 12" 33 1/3 rpm  
Record, guide (cassette, \$6.95)  
Honor Your Partner Albums,  
Rope Skipping, Ball Bouncing  
Vocational Activities, Inc.  
Freeport, New York

**Community:**

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>11 - Individual Acts</u>		<b>SUBJECT</b> <u>Physical Education</u>	
<b>ORIENTATION</b> <u>Safety and Conservation</u>		<b>TOPIC/UNIT</b> <u>Dramatic Play</u>	
BEHAVIORAL OBJECTIVES		STUDENT-CENTERED LEARNING ACTIVITIES	
<b>Cognitive:</b>  Demonstrate in an imaginary hiking experience, safety and conservation as they mimic hiking movements.	<b>In-Class:</b>	<b>Outside or Community:</b>	
	I. Language Arts A. Stressing safety and conservation, the teacher can lead the children to imagine themselves going on a hike to enjoy nature. Then she can direct them in this problem: 1. Let's pretend that we are going on a hike. What are some things we need to take with us? 2. Now that we have gathered all our materials, let's roll our packs into a nice neat bundle in this manner: a. Put down your tarp b. Arrange your blankets c. Put the rest of your things in. d. Roll the pack and tie it up. 3. Off we go... (Imitate walking through the woods, each child in his own way, over a rock, jump a creek, etc.) 4. Time to rest - be careful where you sit. 5. Let's go again (watch your step).	I. Social Studies A. Have a boy scout or scout master speak on safety in the woods. 1. Safety for the camper or hiker. 2. Safety for the natural environment - how to preserve it and respect for private property. B. Have the children bring articles they would take with them on a hike, and demonstrate how to pack them and use them properly.	
<b>Affective:</b>  Investigate new sources of safety precautions necessary for outdoor living and conservation of natural resources.			
<b>Skills Used:</b>  1. Outdoor living 2. Locomotor skills 3. Creative dramatics			

(Continued)

## SUGGESTED RESOURCES

Publications:

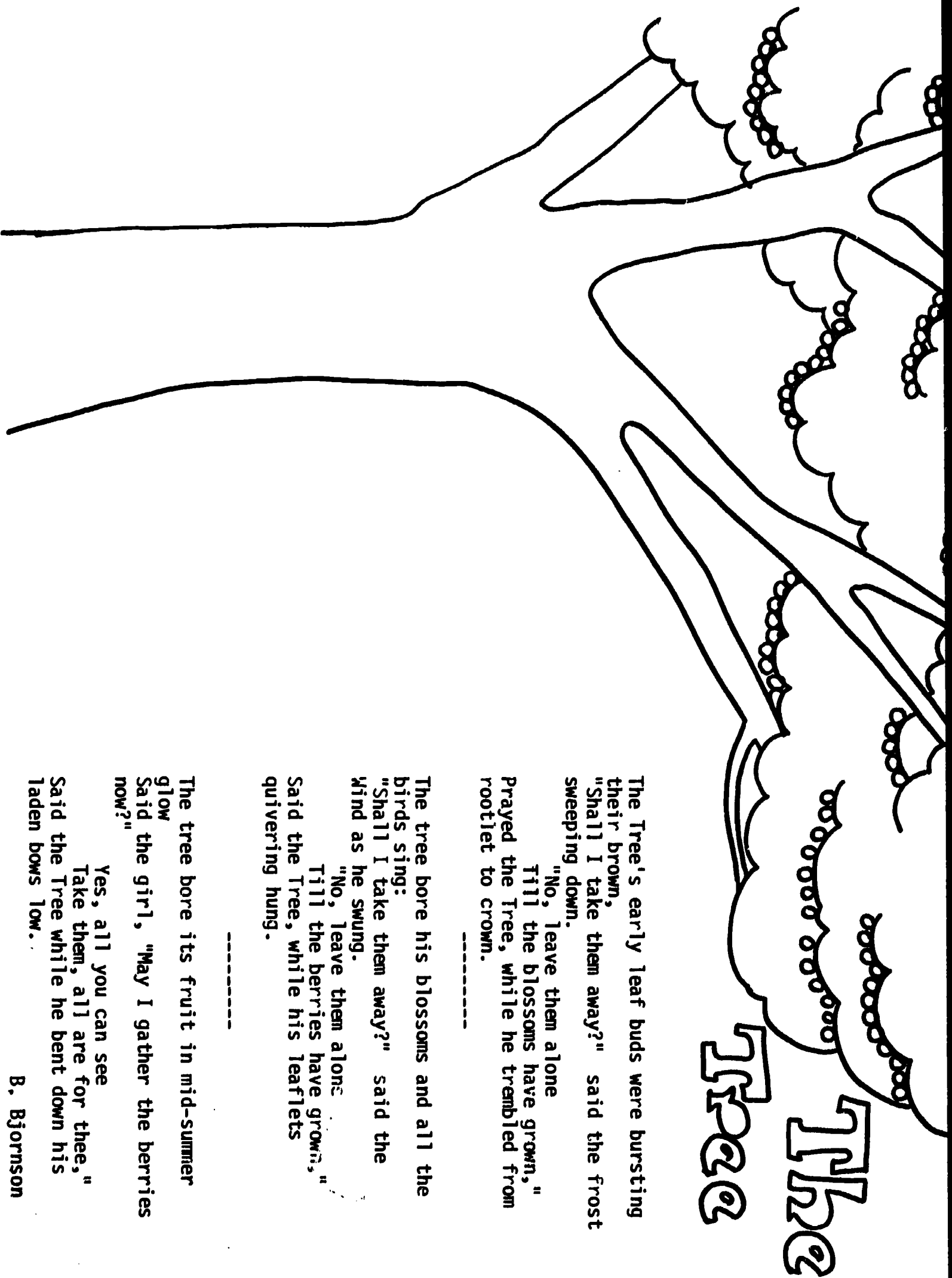
Dauer, Victor, Fitness for Elementary School Children Through Physical Education, Burgess Pub. Co., 1962, p. 105  
 Webelos Scout Book, Boy Scouts of America

Audio—Visual:Community:

## CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

- I. 6. Make biases so we can find our way back.
7. Pick a good spot for the tent and put the tent up.
8. Let's go find some firewood for a campfire.
9. Clear out a spot for the fire, carry stones to put around it, light the fire, cook your supper on it.
10. Eat your supper, be careful how you dispose of wastes, so wild animals don't come too close.
11. Watch where you walk, be careful not to step on small plants.  
Etc.



The Tree's early leaf buds were bursting  
their brown,  
"Shall I take them away?" said the frost  
sweeping down.  
"No, leave them alone  
Till the blossoms have grown,"  
Prayed the Tree, while he trembled from  
rootlet to crown.

-----

The tree bore his blossoms and all the  
birds sing:  
"Shall I take them away?" said the  
wind as he swung.  
"No, leave them alone  
Till the berries have grown,"  
Said the Tree, while his leaflets  
quivering hung.

-----

The tree bore its fruit in mid-summer  
glow  
Said the girl, "May I gather the berries  
now?"

Yes, all you can see  
Take them, all are for thee,"  
Said the Tree while he bent down his  
laden bows low.

B. Bjornson

BEST COPY AVAILABLE

<b>Environmental:</b>		<b>Integrated with:</b>	
<b>CONCEPT NO.</b> <u>12 - Stewardship</u>		<b>SUBJECT</b> <u>Social Studies and Language Arts</u>	
<b>ORIENTATION</b> <u>Rights of Others</u>		<b>TOPIC/UNIT</b> <u>Rights of Others</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Demonstrate that in showing respect for the rights of others, his rights will also be respected.		<b>In-Class:</b> I. Language Arts A. Discuss reasons for a sidewalk. If everyone walks on grass, grass will die, and a path will be worn. B. Show how noise in the classroom disrupts the class through dramatization: 1. loud music or talking 2. interruptions 3. noisy feet C. How do you feel about stepping on an ant hill? How do you feel about animals you see in cages? How do you feel about people picking flowers in the park? D. Color picture on next page to show the kind of world you would like to live in.	<b>Outside or Community:</b> I. Social Studies A. Take a walk to look for "eyesores". Look at junk yard so displeasing to the eye. What can be done? (Dismantle and recycle glass and metal). A junk yard is not really pollution but is displeasing to the eye, thus the owner should screen it from view by a tall fence; use trees as a visual shield. B. Show factory smoke stacks polluting air and dumping waste products into water. Results: dirty air making it difficult to breathe, discolored water, plants and fish die, algae on top of water, nobody can swim or fish or boat in it. Beauty is destroyed). C. Litterbugging makes picnic area, home school, etc., look displeasing to the eye. Conduct litterbug cleanup walks.
<b>Affective:</b> Demonstrate his regard to the rights of others in the classroom by being quiet while others are trying to study, not interrupting those trying to study unless very important, etc.			
<b>Skills Used:</b> 1. Observation 2. Appreciation 3. Listening			

110/111

**SUGGESTED RESOURCES****CONTINUED OR ADDED LEARNING ACTIVITIES****Publications:****Audio-Visual:**

No Time To Waste, Kit 10, p. 9 ICE

Our Environment 2 Kit 30

(filmstrips and records ICE)

1. Sound and Noise

2. Quiet, Please

3. Noise and You

Our Environment 3 Kit 31

(filmstrips and records ICE)

1. It's Really Up to Us

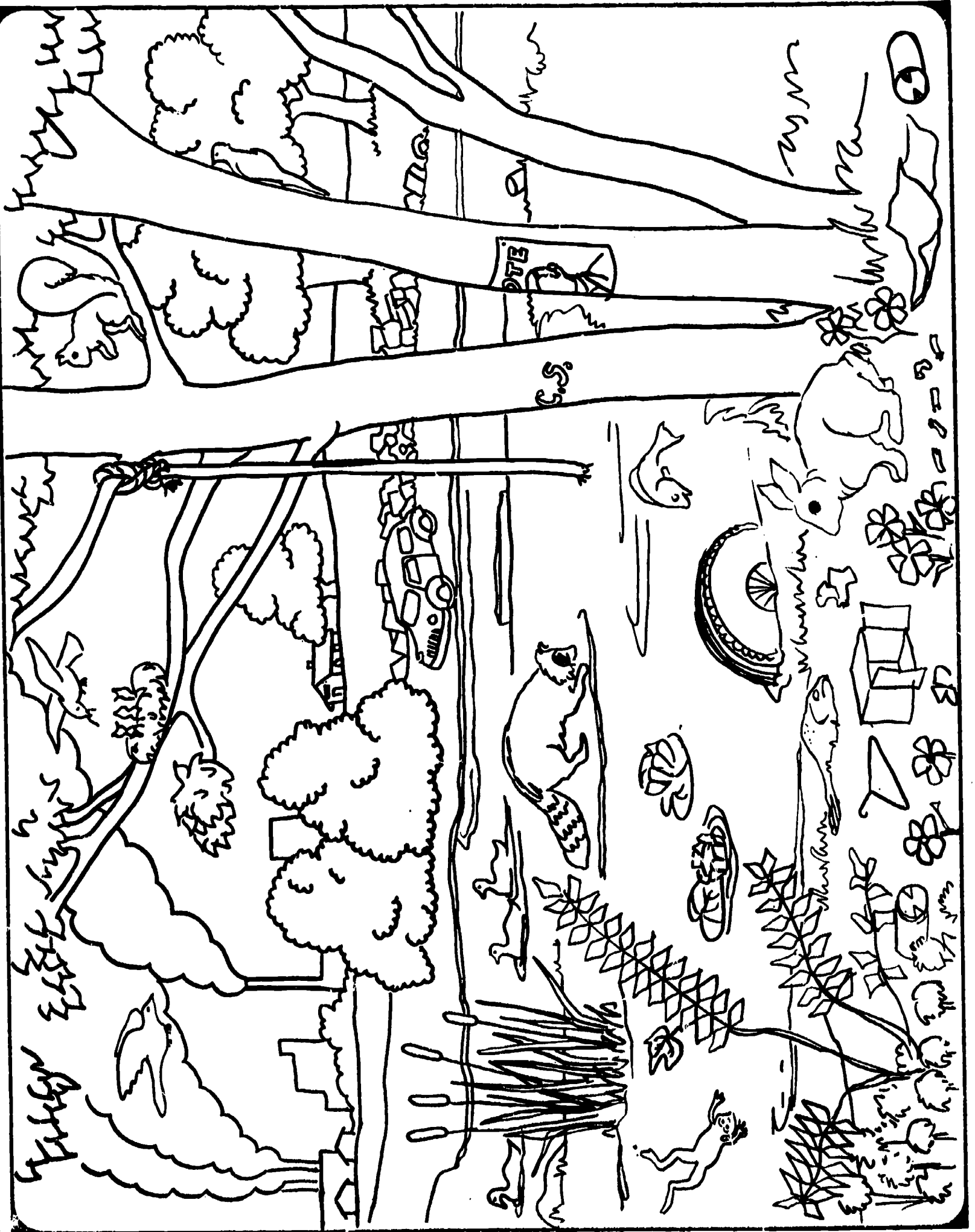
2. What is the Problem?

**Community:**

THE PRESIDENT'S ENVIRONMENTAL MERIT AWARDS PROGRAM

113

**COLOR—CLEAN** this **ENVIRONMENT** and give it to your teacher. Color **IN** what you like in this environment. Color **OVER** what you don't like. (See back of page.)



BEST COPY AVAILABLE

<b>Environmental:</b> <b>CONCEPT NO.</b> <u>12 - Stewardship</u> <b>ORIENTATION</b> <u>Public Property</u>		<b>Integrated with:</b> <b>SUBJECT</b> <u>Social Studies</u> <b>TOPIC/UNIT</b> <u>Care of Books</u>	
<b>BEHAVIORAL OBJECTIVES</b>		<b>STUDENT-CENTERED LEARNING ACTIVITIES</b>	
<b>Cognitive:</b> Demonstrate either how books should or should not be taken care of. List property in the room and outside which students should care for.		<b>In-Class:</b>	<b>Outside or Community:</b>
<b>Affective:</b> Suggest better ways for students to care for school property.		I. Social Studies A. Show filmstrip, <u>How to Take Care of Books.</u> B. Have children dramatize the correct or incorrect way to handle books. C. Discuss why school books should be cared for. D. From discussion in number four, list other school property which should be cared for; children may want to tell how to care for each article listed. E. Discuss how our taking care of property now will help our future. (Include with this, that if we mar our books, will the first graders coming next year enjoy reading as much as we have?)	
<b>Skills Used:</b> 1. Dramatization 2. Courtesy			

**SUGGESTED RESOURCES**

**CONTINUED OR ADDED LEARNING ACTIVITIES**

Publications:

Audio—Visual:

How to Take Care of Books,  
Filmstrip  
Paper Makes Wis. Great,  
3319 FS St 4 ICE  
Paper and Pulp Making, BAVI \$2.25  
Paper, BAVI \$2.00

Community: